

Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 5
2: B ← 3
3: C ← 3
4: D ← 7
5: se (A > 3) ∧ (B ≤ 8)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 2
2: B ← 7
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 7
2: B ← 4
3: F ← 1 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 4
2: B ← 7
3: J ← 4
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 4
11:    fim{se}
12:    L ← K + 1
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 1
2: N ← 7
3: P ← 4
4: se (M < 1)
5:   se (N ≥ 1)
6:     se (P ≤ 3)
7:       M ← M + 1
8:     senão
9:       N ← N + 5
10:      P ← P + 1
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 2
2: M ← 6
3: H ← 7
4: K ← K + 3
5: M ← M + K
6: se (H < 2)
7:   K ← K + 8
8:   M ← K + 8
9: senão
10:  H ← H + 4
11:  M ← 2
12: fim{se}
13: H ← 4
14: K ← K + 2-3
15: M ← M + 6-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 2
2: B ← 6
3: C ← 1
4: D ← 8
5: se (A > 1) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 7
2: B ← 3
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 8
2: B ← 3
3: F ← 5 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 4
2: B ← 7
3: J ← 3
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 2
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 3
2: N ← 4
3: P ← 6
4: se (M < 3)
5:   se (N ≥ 1)
6:     se (P ≤ 2)
7:       M ← M + 8
8:     senão
9:       N ← N + 5
10:      P ← P + 4
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 4
2: M ← 5
3: H ← 6
4: K ← K + 3
5: M ← M + K
6: se (H < 4)
7:   K ← K + 8
8:   M ← K + 4
9: senão
10:  H ← H + 3
11:  M ← 2
12: fim{se}
13: H ← 8
14: K ← K + 4-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 3
2: B ← 8
```

```
3: C ← 5
4: D ← 5
5: se (A > 2) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 6
2: B ← 4
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 8
2: B ← 2
3: F ← 6 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 3
3: C ← 1
4: D ← 6
5: se (A > 5) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 2
2: B ← 5
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 1
3: F ← 7 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 4
2: B ← 3
3: J ← 7
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 6
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 5
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 7
2: N ← 7
3: P ← 4
4: se (M < 4)
5:   se (N ≥ 1)
6:     se (P ≤ 2)
7:       M ← M + 7
8:     senão
9:       N ← N + 2
10:      P ← P + 3
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 1
2: M ← 4
3: H ← 7
4: K ← K + 5
5: M ← M + K
6: se (H < 6)
7:   K ← K + 6
8:   M ← K + 7
9: senão
10:  H ← H + 8
11:  M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 1-3
15: M ← M + 4-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 5
2: B ← 2
3: C ← 2
4: D ← 7
5: se (A > 1) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 8
2: B ← 5
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 7
2: B ← 5
3: F ← 5 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 1
2: B ← 2
3: J ← 3
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 1
2: N ← 3
3: P ← 1
4: se (M < 2)
5:   se (N ≥ 5)
6:     se (P ≤ 7)
7:       M ← M + 3
8:     senão
9:       N ← N + 4
10:    P ← P + 3
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 5
2: M ← 1
3: H ← 5
4: K ← K + 3
5: M ← M + K
6: se (H < 3)
7:   K ← K + 5
8:   M ← K + 2
9: senão
10:  H ← H + 6
11:  M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 5-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 8
2: B ← 4
```

```
3: C ← 2
4: D ← 1
5: se (A > 5) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 7
2: B ← 7
3: C ← 8
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 7
2: B ← 4
3: F ← 1 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 4
3: C ← 3
4: D ← 2
5: se (A > 5) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 1)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 6
2: B ← 3
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 1
2: B ← 1
3: F ← 1 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 7
2: B ← 8
3: J ← 7
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 4
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 3
2: N ← 8
3: P ← 3
4: se (M < 4)
5:   se (N ≥ 5)
6:     se (P ≤ 4)
7:       M ← M + 2
8:     senão
9:       N ← N + 8
10:    P ← P + 5
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 5
2: M ← 3
3: H ← 6
4: K ← K + 4
5: M ← M + K
6: se (H < 1)
7:   K ← K + 8
8:   M ← K + 2
9: senão
10:  H ← H + 5
11:  M ← 2
12: fim{se}
13: H ← 6
14: K ← K + 5-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 4
2: B ← 5
3: C ← 2
4: D ← 1
5: se (A > 4) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 3
2: B ← 2
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 7
2: B ← 1
3: F ← 3 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 3
3: J ← 6
4: L ← 5
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 8
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 1
2: N ← 4
3: P ← 5
4: se (M < 2)
5:   se (N ≥ 6)
6:     se (P ≤ 8)
7:       M ← M + 7
8:     senão
9:       N ← N + 3
10:    P ← P + 6
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 4
2: M ← 7
3: H ← 4
4: K ← K + 7
5: M ← M + K
6: se (H < 4)
7:   K ← K + 7
8:   M ← K + 3
9: senão
10:  H ← H + 6
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 4-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 4
2: B ← 2
```

```
3: C ← 2
4: D ← 8
5: se (A > 2) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 3
2: B ← 4
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 8
2: B ← 6
3: F ← 6 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 7
2: B ← 7
3: C ← 8
4: D ← 2
5: se (A > 2) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 8) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 8
2: B ← 5
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 2
2: B ← 8
3: F ← 8 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 5
2: B ← 2
3: J ← 4
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 2
9:     senão
10:      K ← 2
11:   fim{se}
12:   L ← K + 5
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 8
2: N ← 5
3: P ← 7
4: se (M < 6)
5:   se (N ≥ 1)
6:     se (P ≤ 5)
7:       M ← M + 2
8:     senão
9:       N ← N + 8
10:      P ← P + 7
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 8
2: M ← 3
3: H ← 5
4: K ← K + 2
5: M ← M + K
6: se (H < 1)
7:   K ← K + 5
8:   M ← K + 4
9: senão
10:   H ← H + 8
11:   M ← 2
12: fim{se}
13: H ← 8
14: K ← K + 8-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 4
2: B ← 5
3: C ← 1
4: D ← 1
5: se (A > 5) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 8) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 7
2: B ← 8
3: C ← 6
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 3
2: B ← 3
3: F ← 6 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 7
2: B ← 6
3: J ← 6
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 6
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 3
2: N ← 3
3: P ← 7
4: se (M < 5)
5:   se (N ≥ 3)
6:     se (P ≤ 1)
7:       M ← M + 7
8:     senão
9:       N ← N + 6
10:      P ← P + 1
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 6
2: M ← 1
3: H ← 7
4: K ← K + 3
5: M ← M + K
6: se (H < 5)
7:   K ← K + 5
8:   M ← K + 1
9: senão
10:   H ← H + 5
11:   M ← 2
12: fim{se}
13: H ← 1
14: K ← K + 6-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 1
2: B ← 7
```

```
3: C ← 4
4: D ← 5
5: se (A > 5) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 4) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 2
2: B ← 2
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 6
3: F ← 1 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 3
2: B ← 3
3: C ← 2
4: D ← 2
5: se (A > 2) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 5
2: B ← 1
3: C ← 3
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 4
2: B ← 3
3: F ← 5 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 6
2: B ← 3
3: J ← 6
4: L ← 6
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 8
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 3
2: N ← 6
3: P ← 4
4: se (M < 4)
5:   se (N ≥ 1)
6:     se (P ≤ 6)
7:       M ← M + 4
8:     senão
9:       N ← N + 4
10:    P ← P + 6
11:  fim{se}
12:  M ← N + P
13: fim{se}
14: P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 7
2: M ← 8
3: H ← 3
4: K ← K + 5
5: M ← M + K
6: se (H < 1)
7:   K ← K + 3
8:   M ← K + 5
9: senão
10:  H ← H + 8
11:  M ← 2
12: fim{se}
13: H ← 7
14: K ← K + 7-3
15: M ← M + 8-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 4
2: B ← 6
3: C ← 3
4: D ← 2
5: se (A > 5) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 8
2: B ← 1
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 8
2: B ← 6
3: F ← 3 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 7
2: B ← 7
3: J ← 3
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 8
2: N ← 1
3: P ← 8
4: se (M < 8)
5:   se (N ≥ 1)
6:     se (P ≤ 4)
7:       M ← M + 2
8:     senão
9:       N ← N + 2
10:    P ← P + 8
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 2
2: M ← 5
3: H ← 7
4: K ← K + 6
5: M ← M + K
6: se (H < 3)
7:   K ← K + 7
8:   M ← K + 1
9: senão
10:  H ← H + 2
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 2-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 3
2: B ← 5
```

```
3: C ← 6
4: D ← 6
5: se (A > 3) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 2
2: B ← 2
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 5
2: B ← 8
3: F ← 6 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 5
3: C ← 8
4: D ← 3
5: se (A > 4) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 2
2: B ← 4
3: C ← 3
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 2
2: B ← 3
3: F ← 4 + 7
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 6
2: B ← 3
3: J ← 8
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 1
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 6
2: N ← 6
3: P ← 5
4: se (M < 1)
5:   se (N ≥ 2)
6:     se (P ≤ 4)
7:       M ← M + 2
8:     senão
9:       N ← N + 6
10:      P ← P + 3
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 4
2: M ← 2
3: H ← 5
4: K ← K + 4
5: M ← M + K
6: se (H < 4)
7:   K ← K + 2
8:   M ← K + 4
9: senão
10:  H ← H + 3
11:  M ← 2
12: fim{se}
13: H ← 6
14: K ← K + 4-3
15: M ← M + 2-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 6
2: B ← 6
3: C ← 4
4: D ← 5
5: se (A > 6) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 6) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 1
2: B ← 2
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 6
2: B ← 4
3: F ← 7 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 7
2: B ← 1
3: J ← 2
4: L ← 3
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 2
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 4
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 1
2: N ← 2
3: P ← 6
4: se (M < 6)
5:   se (N ≥ 1)
6:     se (P ≤ 4)
7:       M ← M + 5
8:     senão
9:       N ← N + 6
10:      P ← P + 4
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 7
2: M ← 1
3: H ← 4
4: K ← K + 3
5: M ← M + K
6: se (H < 2)
7:   K ← K + 1
8:   M ← K + 7
9: senão
10:  H ← H + 7
11:  M ← 2
12: fim{se}
13: H ← 8
14: K ← K + 7-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 5
2: B ← 5
```

```
3: C ← 8
4: D ← 5
5: se (A > 2) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 1)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 5
2: B ← 8
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 8
3: F ← 1 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 1
3: C ← 3
4: D ← 6
5: se (A > 6) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 2) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 1
2: B ← 2
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 5
3: F ← 8 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 7
2: B ← 8
3: J ← 7
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 2
9:     senão
10:      K ← 2
11:    fim{se}
12:    L ← K + 3
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 3
2: N ← 5
3: P ← 5
4: se (M < 4)
5:   se (N ≥ 5)
6:     se (P ≤ 1)
7:       M ← M + 1
8:     senão
9:       N ← N + 3
10:      P ← P + 5
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 1
2: M ← 4
3: H ← 5
4: K ← K + 6
5: M ← M + K
6: se (H < 3)
7:   K ← K + 2
8:   M ← K + 5
9: senão
10:  H ← H + 6
11:  M ← 2
12: fim{se}
13: H ← 3
14: K ← K + 1-3
15: M ← M + 4-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 3
2: B ← 6
3: C ← 7
4: D ← 3
5: se (A > 1) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 4
2: B ← 4
3: C ← 6
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 6
2: B ← 1
3: F ← 8 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 7
3: J ← 4
4: L ← 4
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 2
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 4
2: N ← 8
3: P ← 3
4: se (M < 2)
5:   se (N ≥ 5)
6:     se (P ≤ 6)
7:       M ← M + 1
8:     senão
9:       N ← N + 8
10:      P ← P + 3
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 8
2: M ← 8
3: H ← 1
4: K ← K + 3
5: M ← M + K
6: se (H < 5)
7:   K ← K + 6
8:   M ← K + 8
9: senão
10:  H ← H + 8
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 8-3
15: M ← M + 8-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 2
2: B ← 8
```

```
3: C ← 1
4: D ← 4
5: se (A > 1) ∧ (B ≤ 8)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 5
2: B ← 2
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 5
2: B ← 5
3: F ← 3 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 3
2: B ← 6
3: C ← 2
4: D ← 3
5: se (A > 2) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 5
2: B ← 2
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 7
3: F ← 2 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 1
2: B ← 1
3: J ← 1
4: L ← 5
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 8
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 3
2: N ← 6
3: P ← 1
4: se (M < 5)
5:   se (N ≥ 1)
6:     se (P ≤ 3)
7:       M ← M + 7
8:     senão
9:       N ← N + 5
10:      P ← P + 5
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 5
3: H ← 6
4: K ← K + 3
5: M ← M + K
6: se (H < 4)
7:   K ← K + 1
8:   M ← K + 4
9: senão
10:  H ← H + 4
11:  M ← 2
12: fim{se}
13: H ← 6
14: K ← K + 3-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 8
2: B ← 5
3: C ← 4
4: D ← 3
5: se (A > 4) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 7
2: B ← 2
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 4
2: B ← 5
3: F ← 1 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 3
2: B ← 7
3: J ← 3
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 5
2: N ← 4
3: P ← 8
4: se (M < 6)
5:   se (N ≥ 1)
6:     se (P ≤ 4)
7:       M ← M + 4
8:     senão
9:       N ← N + 1
10:    P ← P + 8
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 5
2: M ← 5
3: H ← 6
4: K ← K + 1
5: M ← M + K
6: se (H < 3)
7:   K ← K + 2
8:   M ← K + 3
9: senão
10:  H ← H + 6
11:  M ← 2
12: fim{se}
13: H ← 7
14: K ← K + 5-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 3
2: B ← 4
```

```
3: C ← 5
4: D ← 8
5: se (A > 5) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 5
2: B ← 4
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 3)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 6
2: B ← 3
3: F ← 3 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

75853



Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 7
2: B ← 7
3: C ← 4
4: D ← 5
5: se (A > 1) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 7
2: B ← 4
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 5
3: F ← 7 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 2
2: B ← 3
3: J ← 2
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 4
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 5
2: N ← 5
3: P ← 4
4: se (M < 8)
5:   se (N ≥ 4)
6:     se (P ≤ 3)
7:       M ← M + 4
8:     senão
9:       N ← N + 3
10:      P ← P + 4
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 1
3: H ← 7
4: K ← K + 4
5: M ← M + K
6: se (H < 5)
7:   K ← K + 7
8:   M ← K + 6
9: senão
10:  H ← H + 6
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 3-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 8
2: B ← 3
3: C ← 1
4: D ← 8
5: se (A > 5) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 4
2: B ← 7
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 3
2: B ← 1
3: F ← 3 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 3
2: B ← 3
3: J ← 8
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 4
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 2
2: N ← 2
3: P ← 7
4: se (M < 7)
5:   se (N ≥ 6)
6:     se (P ≤ 7)
7:       M ← M + 7
8:     senão
9:       N ← N + 4
10:      P ← P + 4
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 5
2: M ← 7
3: H ← 4
4: K ← K + 6
5: M ← M + K
6: se (H < 2)
7:   K ← K + 8
8:   M ← K + 1
9: senão
10:  H ← H + 5
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 5-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 4
2: B ← 1
```

```
3: C ← 3
4: D ← 1
5: se (A > 2) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 4
2: B ← 2
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 6
2: B ← 6
3: F ← 6 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 7
2: B ← 7
3: C ← 4
4: D ← 7
5: se (A > 3) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 6
2: B ← 7
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 5
2: B ← 2
3: F ← 1 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 2
2: B ← 6
3: J ← 5
4: L ← 5
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 8
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 5
2: N ← 4
3: P ← 7
4: se (M < 6)
5:   se (N ≥ 1)
6:     se (P ≤ 1)
7:       M ← M + 2
8:     senão
9:       N ← N + 8
10:    P ← P + 4
11:  fim{se}
12:  M ← N + P
13: fim{se}
14: P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 4
3: H ← 2
4: K ← K + 8
5: M ← M + K
6: se (H < 5)
7:   K ← K + 1
8:   M ← K + 8
9: senão
10:  H ← H + 7
11:  M ← 2
12: fim{se}
13: H ← 7
14: K ← K + 3-3
15: M ← M + 4-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 8
2: B ← 2
3: C ← 4
4: D ← 7
5: se (A > 6) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 5
2: B ← 4
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 7)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 6
2: B ← 7
3: F ← 2 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 1
3: J ← 6
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 6
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 5
2: N ← 5
3: P ← 4
4: se (M < 7)
5:   se (N ≥ 4)
6:     se (P ≤ 8)
7:       M ← M + 3
8:     senão
9:       N ← N + 3
10:    P ← P + 2
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 1
2: M ← 3
3: H ← 6
4: K ← K + 6
5: M ← M + K
6: se (H < 3)
7:   K ← K + 7
8:   M ← K + 7
9: senão
10:  H ← H + 4
11:  M ← 2
12: fim{se}
13: H ← 1
14: K ← K + 1-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 5
2: B ← 2
```

```
3: C ← 8
4: D ← 8
5: se (A > 4) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 4) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 1
2: B ← 7
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 1
2: B ← 2
3: F ← 2 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 7
2: B ← 7
3: C ← 6
4: D ← 3
5: se (A > 2) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 5
2: B ← 2
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 6
2: B ← 7
3: F ← 4 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 7
2: B ← 2
3: J ← 7
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 5
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 6
2: N ← 3
3: P ← 2
4: se (M < 5)
5:   se (N ≥ 3)
6:     se (P ≤ 1)
7:       M ← M + 3
8:     senão
9:       N ← N + 5
10:    P ← P + 6
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 1
3: H ← 8
4: K ← K + 7
5: M ← M + K
6: se (H < 1)
7:   K ← K + 2
8:   M ← K + 2
9: senão
10:  H ← H + 8
11:  M ← 2
12: fim{se}
13: H ← 1
14: K ← K + 3-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 8
2: B ← 4
3: C ← 6
4: D ← 3
5: se (A > 3) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 2) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 3
2: B ← 8
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 3)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 7
2: B ← 1
3: F ← 3 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 1
3: J ← 1
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 3
9:     senão
10:      K ← 4
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 8
2: N ← 6
3: P ← 3
4: se (M < 5)
5:   se (N ≥ 1)
6:     se (P ≤ 7)
7:       M ← M + 3
8:     senão
9:       N ← N + 6
10:    P ← P + 5
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 2
2: M ← 5
3: H ← 5
4: K ← K + 2
5: M ← M + K
6: se (H < 2)
7:   K ← K + 6
8:   M ← K + 5
9: senão
10:  H ← H + 4
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 2-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 6
2: B ← 3
```

```
3: C ← 1
4: D ← 1
5: se (A > 4) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 6) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 5
2: B ← 3
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 6
2: B ← 7
3: F ← 8 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 8
2: B ← 8
3: C ← 2
4: D ← 4
5: se (A > 6) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 7) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 4
2: B ← 8
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 7
2: B ← 4
3: F ← 4 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 1
2: B ← 8
3: J ← 5
4: L ← 6
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 2
11:   fim{se}
12:   L ← K + 5
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 6
2: N ← 7
3: P ← 4
4: se (M < 2)
5:   se (N ≥ 3)
6:     se (P ≤ 4)
7:       M ← M + 6
8:     senão
9:       N ← N + 3
10:      P ← P + 8
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 4
2: M ← 3
3: H ← 2
4: K ← K + 6
5: M ← M + K
6: se (H < 2)
7:   K ← K + 5
8:   M ← K + 4
9: senão
10:   H ← H + 6
11:   M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 4-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 5
2: B ← 8
3: C ← 5
4: D ← 5
5: se (A > 2) ∧ (B ≤ 8)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 8
2: B ← 4
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 7
2: B ← 6
3: F ← 8 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 5
2: B ← 3
3: J ← 6
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 3
2: N ← 7
3: P ← 7
4: se (M < 1)
5:   se (N ≥ 1)
6:     se (P ≤ 2)
7:       M ← M + 3
8:     senão
9:       N ← N + 7
10:      P ← P + 5
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 2
2: M ← 7
3: H ← 1
4: K ← K + 6
5: M ← M + K
6: se (H < 4)
7:   K ← K + 5
8:   M ← K + 4
9: senão
10:   H ← H + 5
11:   M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 2-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 4
2: B ← 3
```

```
3: C ← 1
4: D ← 8
5: se (A > 4) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 2
2: B ← 3
3: C ← 8
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 5
3: F ← 1 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 5
3: C ← 2
4: D ← 6
5: se (A > 5) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 7
2: B ← 5
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 5
2: B ← 7
3: F ← 6 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 8
2: B ← 7
3: J ← 7
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 3
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 8
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 8
2: N ← 5
3: P ← 8
4: se (M < 7)
5:   se (N ≥ 3)
6:     se (P ≤ 4)
7:       M ← M + 3
8:     senão
9:       N ← N + 1
10:      P ← P + 3
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 2
2: M ← 1
3: H ← 1
4: K ← K + 3
5: M ← M + K
6: se (H < 6)
7:   K ← K + 3
8:   M ← K + 3
9: senão
10:  H ← H + 2
11:  M ← 2
12: fim{se}
13: H ← 3
14: K ← K + 2-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 1
2: B ← 1
3: C ← 7
4: D ← 1
5: se (A > 6) ∧ (B ≤ 8)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 6
2: B ← 1
3: C ← 6
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 5
2: B ← 8
3: F ← 5 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 7
2: B ← 2
3: J ← 1
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 8
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 2
2: N ← 1
3: P ← 7
4: se (M < 7)
5:   se (N ≥ 1)
6:     se (P ≤ 7)
7:       M ← M + 6
8:     senão
9:       N ← N + 5
10:      P ← P + 3
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 1
2: M ← 7
3: H ← 4
4: K ← K + 8
5: M ← M + K
6: se (H < 3)
7:   K ← K + 4
8:   M ← K + 4
9: senão
10:  H ← H + 7
11:  M ← 2
12: fim{se}
13: H ← 3
14: K ← K + 1-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 5
2: B ← 1
```

```
3: C ← 6
4: D ← 4
5: se (A > 6) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 3
2: B ← 3
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 5
3: F ← 1 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 5
2: B ← 3
3: C ← 6
4: D ← 7
5: se (A > 2) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 7
2: B ← 8
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 3)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 6
2: B ← 2
3: F ← 2 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 3
2: B ← 8
3: J ← 5
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 6
9:     senão
10:      K ← 6
11:    fim{se}
12:    L ← K + 4
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 1
2: N ← 4
3: P ← 7
4: se (M < 2)
5:   se (N ≥ 3)
6:     se (P ≤ 2)
7:       M ← M + 4
8:     senão
9:       N ← N + 8
10:      P ← P + 8
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 3
3: H ← 8
4: K ← K + 3
5: M ← M + K
6: se (H < 4)
7:   K ← K + 4
8:   M ← K + 2
9: senão
10:  H ← H + 5
11:  M ← 2
12: fim{se}
13: H ← 7
14: K ← K + 3-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 1
2: B ← 5
3: C ← 4
4: D ← 6
5: se (A > 4) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 6) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 8
2: B ← 6
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 2
2: B ← 6
3: F ← 5 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 4
3: J ← 7
4: L ← 5
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 4
11:    fim{se}
12:    L ← K + 4
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 6
2: N ← 2
3: P ← 8
4: se (M < 4)
5:   se (N ≥ 5)
6:     se (P ≤ 4)
7:       M ← M + 5
8:     senão
9:       N ← N + 5
10:    P ← P + 4
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 7
2: M ← 5
3: H ← 5
4: K ← K + 1
5: M ← M + K
6: se (H < 6)
7:   K ← K + 4
8:   M ← K + 8
9: senão
10:  H ← H + 7
11:  M ← 2
12: fim{se}
13: H ← 8
14: K ← K + 7-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 3
2: B ← 2
```

```
3: C ← 5
4: D ← 6
5: se (A > 1) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 6
2: B ← 6
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 5
2: B ← 8
3: F ← 6 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 6
2: B ← 8
3: C ← 4
4: D ← 3
5: se (A > 5) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 5) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 1
2: B ← 7
3: C ← 6
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 6
3: F ← 1 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 4
2: B ← 2
3: J ← 4
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 2
11:    fim{se}
12:    L ← K + 7
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 4
2: N ← 5
3: P ← 4
4: se (M < 8)
5:   se (N ≥ 4)
6:     se (P ≤ 1)
7:       M ← M + 2
8:     senão
9:       N ← N + 4
10:      P ← P + 5
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 8
3: H ← 2
4: K ← K + 5
5: M ← M + K
6: se (H < 6)
7:   K ← K + 2
8:   M ← K + 8
9: senão
10:   H ← H + 3
11:   M ← 2
12: fim{se}
13: H ← 6
14: K ← K + 3-3
15: M ← M + 8-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 1
2: B ← 7
3: C ← 1
4: D ← 6
5: se (A > 2) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 7)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 5
2: B ← 4
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 6
2: B ← 7
3: F ← 3 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 1
2: B ← 1
3: J ← 7
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 5
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 8
2: N ← 1
3: P ← 1
4: se (M < 6)
5:   se (N ≥ 4)
6:     se (P ≤ 2)
7:       M ← M + 6
8:     senão
9:       N ← N + 5
10:    P ← P + 7
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 7
2: M ← 4
3: H ← 1
4: K ← K + 7
5: M ← M + K
6: se (H < 5)
7:   K ← K + 2
8:   M ← K + 7
9: senão
10:   H ← H + 4
11:   M ← 2
12: fim{se}
13: H ← 4
14: K ← K + 7-3
15: M ← M + 4-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 1
2: B ← 4
```

```
3: C ← 6
4: D ← 2
5: se (A > 2) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 5
2: B ← 7
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 1
3: F ← 6 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 7
2: B ← 2
3: C ← 7
4: D ← 5
5: se (A > 2) ∧ (B ≤ 3)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 6) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 3
2: B ← 1
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 2
2: B ← 2
3: F ← 8 + 4
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 6
2: B ← 4
3: J ← 4
4: L ← 4
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 5
9:     senão
10:      K ← 2
11:   fim{se}
12:   L ← K + 8
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 3
2: N ← 8
3: P ← 6
4: se (M < 3)
5:   se (N ≥ 6)
6:     se (P ≤ 5)
7:       M ← M + 5
8:     senão
9:       N ← N + 6
10:    P ← P + 1
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 5
2: M ← 8
3: H ← 6
4: K ← K + 3
5: M ← M + K
6: se (H < 1)
7:   K ← K + 6
8:   M ← K + 5
9: senão
10:   H ← H + 5
11:   M ← 2
12: fim{se}
13: H ← 1
14: K ← K + 5-3
15: M ← M + 8-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 2
2: B ← 4
3: C ← 5
4: D ← 5
5: se (A > 1) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 2)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 3
2: B ← 5
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 4
2: B ← 4
3: F ← 4 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 5
2: B ← 4
3: J ← 3
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 3
9:     senão
10:      K ← 5
11:    fim{se}
12:    L ← K + 5
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 7
2: N ← 2
3: P ← 1
4: se (M < 6)
5:   se (N ≥ 3)
6:     se (P ≤ 3)
7:       M ← M + 7
8:     senão
9:       N ← N + 8
10:    P ← P + 7
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 5
2: M ← 5
3: H ← 1
4: K ← K + 1
5: M ← M + K
6: se (H < 6)
7:   K ← K + 2
8:   M ← K + 7
9: senão
10:   H ← H + 3
11:   M ← 2
12: fim{se}
13: H ← 4
14: K ← K + 5-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 7
2: B ← 1
```

```
3: C ← 1
4: D ← 3
5: se (A > 4) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 4) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 7
2: B ← 5
3: C ← 6
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 3
2: B ← 5
3: F ← 2 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 1
2: B ← 6
3: C ← 8
4: D ← 7
5: se (A > 1) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 1) ∨ (D < 1)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 3
2: B ← 5
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 7
2: B ← 4
3: F ← 8 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 2
2: B ← 2
3: J ← 4
4: L ← 2
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:       K ← 3
11:     fim{se}
12:     L ← K + 6
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 7
2: N ← 5
3: P ← 8
4: se (M < 1)
5:   se (N ≥ 6)
6:     se (P ≤ 5)
7:       M ← M + 4
8:     senão
9:       N ← N + 4
10:     P ← P + 5
11:   fim{se}
12:   M ← N + P
13: fim{se}
14: P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 1
2: M ← 7
3: H ← 4
4: K ← K + 3
5: M ← M + K
6: se (H < 4)
7:   K ← K + 8
8:   M ← K + 1
9: senão
10:   H ← H + 2
11:   M ← 2
12: fim{se}
13: H ← 8
14: K ← K + 1-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 1
2: B ← 3
3: C ← 4
4: D ← 6
5: se (A > 6) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 5) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 8
2: B ← 8
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 1)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 6
2: B ← 3
3: F ← 6 + 7
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 8
2: B ← 7
3: J ← 7
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:       K ← 4
11:     fim{se}
12:     L ← K + 5
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 4
2: N ← 7
3: P ← 1
4: se (M < 6)
5:   se (N ≥ 5)
6:     se (P ≤ 3)
7:       M ← M + 1
8:     senão
9:       N ← N + 7
10:     P ← P + 4
11:   fim{se}
12:   M ← N + P
13:   fim{se}
14:   P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 2
2: M ← 5
3: H ← 6
4: K ← K + 4
5: M ← M + K
6: se (H < 3)
7:   K ← K + 5
8:   M ← K + 2
9: senão
10:   H ← H + 4
11:   M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 2-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 1
2: B ← 8
```

```
3: C ← 2
4: D ← 5
5: se (A > 6) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 6) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 4
2: B ← 3
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 4
2: B ← 4
3: F ← 4 + 5
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 6
2: B ← 1
3: C ← 8
4: D ← 5
5: se (A > 2) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 3) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 4
2: B ← 7
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 3
3: F ← 3 + 8
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 7
2: B ← 8
3: J ← 5
4: L ← 4
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:     senão
10:      K ← 2
11:   fim{se}
12:   L ← K + 7
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 6
2: N ← 3
3: P ← 5
4: se (M < 4)
5:   se (N ≥ 3)
6:     se (P ≤ 7)
7:       M ← M + 8
8:     senão
9:       N ← N + 1
10:    P ← P + 5
11:  fim{se}
12:  M ← N + P
13: fim{se}
14: P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 5
2: M ← 7
3: H ← 2
4: K ← K + 5
5: M ← M + K
6: se (H < 3)
7:   K ← K + 5
8:   M ← K + 4
9: senão
10:   H ← H + 7
11:   M ← 2
12: fim{se}
13: H ← 6
14: K ← K + 5-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 3
2: B ← 4
3: C ← 6
4: D ← 2
5: se (A > 4) ∧ (B ≤ 5)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 7) ∨ (D < 3)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 4
2: B ← 8
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 3)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 1
2: B ← 3
3: F ← 1 + 1
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 4
2: B ← 8
3: J ← 7
4: L ← 3
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 2
9:     senão
10:      K ← 2
11:    fim{se}
12:    L ← K + 7
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 3
2: N ← 6
3: P ← 4
4: se (M < 3)
5:   se (N ≥ 2)
6:     se (P ≤ 7)
7:       M ← M + 6
8:     senão
9:       N ← N + 7
10:    P ← P + 2
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 6
2: M ← 6
3: H ← 8
4: K ← K + 7
5: M ← M + K
6: se (H < 3)
7:   K ← K + 3
8:   M ← K + 8
9: senão
10:   H ← H + 1
11:   M ← 2
12: fim{se}
13: H ← 4
14: K ← K + 6-3
15: M ← M + 6-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 7
2: B ← 4
```

```
3: C ← 6
4: D ← 8
5: se (A > 1) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 4) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 1
2: B ← 2
3: C ← 3
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 6)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 6
2: B ← 5
3: F ← 5 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 3
2: B ← 8
3: C ← 2
4: D ← 4
5: se (A > 3) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 4) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 5
2: B ← 5
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 3)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 3
2: B ← 7
3: F ← 3 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 8
2: B ← 2
3: J ← 4
4: L ← 1
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 3
11:    fim{se}
12:    L ← K + 4
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 1
2: N ← 4
3: P ← 3
4: se (M < 5)
5:   se (N ≥ 6)
6:     se (P ≤ 5)
7:       M ← M + 6
8:     senão
9:       N ← N + 4
10:      P ← P + 2
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 6
2: M ← 7
3: H ← 3
4: K ← K + 4
5: M ← M + K
6: se (H < 4)
7:   K ← K + 5
8:   M ← K + 4
9: senão
10:  H ← H + 5
11:  M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 6-3
15: M ← M + 7-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 2
2: B ← 4
3: C ← 2
4: D ← 6
5: se (A > 2) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 3
2: B ← 6
3: C ← 5
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 5)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 2
2: B ← 7
3: F ← 2 + 7
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 2
2: B ← 8
3: J ← 5
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 4
11:    fim{se}
12:    L ← K + 5
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 7
2: N ← 1
3: P ← 1
4: se (M < 7)
5:   se (N ≥ 6)
6:     se (P ≤ 3)
7:       M ← M + 5
8:     senão
9:       N ← N + 5
10:    P ← P + 6
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 3
2: M ← 3
3: H ← 6
4: K ← K + 4
5: M ← M + K
6: se (H < 1)
7:   K ← K + 2
8:   M ← K + 4
9: senão
10:  H ← H + 7
11:  M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 3-3
15: M ← M + 3-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 7
2: B ← 7
```

```
3: C ← 8
4: D ← 6
5: se (A > 4) ∧ (B ≤ 2)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 6) ∨ (D < 8)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 1
2: B ← 5
3: C ← 3
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 6
2: B ← 1
3: F ← 7 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 8
2: B ← 7
3: C ← 2
4: D ← 6
5: se (A > 5) ∧ (B ≤ 6)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 2
2: B ← 8
3: C ← 7
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 7)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 8
2: B ← 3
3: F ← 6 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 4
2: B ← 8
3: J ← 6
4: L ← 3
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 7
9:   senão
10:    K ← 1
11:  fim{se}
12:  L ← K + 7
```

```
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 5
2: N ← 3
3: P ← 7
4: se (M < 1)
5:   se (N ≥ 6)
6:     se (P ≤ 6)
7:       M ← M + 7
8:   senão
9:     N ← N + 7
10:    P ← P + 5
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 8
2: M ← 6
3: H ← 8
4: K ← K + 3
5: M ← M + K
6: se (H < 4)
7:   K ← K + 8
8:   M ← K + 7
9: senão
10:   H ← H + 6
11:   M ← 2
12: fim{se}
13: H ← 2
14: K ← K + 8-3
15: M ← M + 6-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 3
2: B ← 4
3: C ← 4
4: D ← 2
5: se (A > 6) ∧ (B ≤ 1)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 8) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 1
2: B ← 2
3: C ← 3
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 1
2: B ← 1
3: F ← 1 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 3
2: B ← 1
3: J ← 7
4: L ← 8
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 8
9:   senão
10:    K ← 3
11:  fim{se}
12:  L ← K + 6
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 4
2: N ← 8
3: P ← 6
4: se (M < 5)
5:   se (N ≥ 6)
6:     se (P ≤ 7)
7:       M ← M + 3
8:   senão
9:     N ← N + 7
10:    P ← P + 5
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 6
2: M ← 8
3: H ← 7
4: K ← K + 6
5: M ← M + K
6: se (H < 5)
7:   K ← K + 2
8:   M ← K + 2
9: senão
10:   H ← H + 8
11:   M ← 2
12: fim{se}
13: H ← 3
14: K ← K + 6-3
15: M ← M + 8-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 6
2: B ← 2
```

```
3: C ← 5
4: D ← 5
5: se (A > 3) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:  fim{se}
11: senão
12:   se (C > 1) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 3
2: B ← 2
3: C ← 8
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 2)
10:    se (A > 11)
11:      C ← B + 2
12:    fim{se}
13:    C ← A + B
14:  fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 5
2: B ← 1
3: F ← 2 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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Comando Condicional SE

Nos exercícios a seguir, siga a lógica do algoritmo e escreva o valor final impresso por ele. No final de tudo, some os valores encontrados, de 3 em 3 conforme mostra a grade de correção.

Ex. 1

```
1: A ← 6
2: B ← 4
3: C ← 3
4: D ← 8
5: se (A > 5) ∧ (B ≤ 7)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 3) ∨ (D < 4)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 2

```
1: A ← 7
2: B ← 8
3: C ← 2
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 3

```
1: G ← 2
2: B ← 2
3: F ← 5 + 2
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 4

```
1: H ← 2
2: B ← 2
3: J ← 3
4: L ← 3
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 1
9:     senão
10:      K ← 3
11:   fim{se}
12:   L ← K + 4
```

```
13:   fim{se}
14:   L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 5

```
1: M ← 8
2: N ← 4
3: P ← 4
4: se (M < 4)
5:   se (N ≥ 2)
6:     se (P ≤ 2)
7:       M ← M + 4
8:     senão
9:       N ← N + 2
10:      P ← P + 2
11:    fim{se}
12:    M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 6

```
1: K ← 3
2: M ← 1
3: H ← 2
4: K ← K + 2
5: M ← M + K
6: se (H < 5)
7:   K ← K + 6
8:   M ← K + 4
9: senão
10:   H ← H + 4
11:   M ← 2
12: fim{se}
13: H ← 4
14: K ← K + 3-3
15: M ← M + 1-1
16: escreva K + M + H
```

Ex. 7

```
1: A ← 6
2: B ← 4
3: C ← 1
4: D ← 1
5: se (A > 5) ∧ (B ≤ 4)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 3) ∨ (D < 5)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 8

```
1: A ← 4
2: B ← 6
3: C ← 4
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 8)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 9

```
1: G ← 8
2: B ← 1
3: F ← 4 + 6
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Ex. 10

```
1: H ← 3
2: B ← 6
3: J ← 8
4: L ← 7
5: se (H < 6)
6:   se (B < 5)
7:     se (J ≤ 5)
8:       K ← 4
9:     senão
10:      K ← 2
11:    fim{se}
12:    L ← K + 5
13:  fim{se}
14:  L ← L + 1
15: fim{se}
16: escrevaJ + L-H
```

Ex. 11

```
1: M ← 4
2: N ← 3
3: P ← 2
4: se (M < 7)
5:   se (N ≥ 1)
6:     se (P ≤ 2)
7:       M ← M + 6
8:     senão
9:       N ← N + 3
10:    P ← P + 6
11:  fim{se}
12:  M ← N + P
13:  fim{se}
14:  P ← N + M
15: fim{se}
16: escreva P + M + N
```

Ex. 12

```
1: K ← 2
2: M ← 5
3: H ← 2
4: K ← K + 4
5: M ← M + K
6: se (H < 4)
7:   K ← K + 5
8:   M ← K + 6
9: senão
10:   H ← H + 1
11:   M ← 2
12: fim{se}
13: H ← 5
14: K ← K + 2-3
15: M ← M + 5-1
16: escreva K + M + H
```

Ex. 13

```
1: A ← 4
2: B ← 6
```

```
3: C ← 2
4: D ← 3
5: se (A > 3) ∧ (B ≤ 8)
6:   se (C < D)
7:     C ← C + 1
8:   senão
9:     D ← D + 3
10:   fim{se}
11: senão
12:   se (C > 2) ∨ (D < 6)
13:     C ← C × 2
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)-D
```

Ex. 14

```
1: A ← 8
2: B ← 1
3: C ← 1
4: se ((A+C) > (B+6))
5:   A ← A + 5
6:   se (B > 4)
7:     A ← A + 2
8:   fim{se}
9:   se (C < 4)
10:     se (A > 11)
11:       C ← B + 2
12:     fim{se}
13:     C ← A + B
14:   fim{se}
15: fim{se}
16: escreva (A + B + C)
```

Ex. 15

```
1: G ← 8
2: B ← 8
3: F ← 5 + 3
4: se ((G > B) ∨ (F < 12))
5:   se (B ≥ 3)
6:     F ← F + 2
7:   fim{se}
8:   F ← F + 3
9: fim{se}
10: se (G ≤ 5)
11:   se (((B + 2) > 6) ∧ (F > 3))
12:     B ← B + 2
13:   fim{se}
14: fim{se}
15: G ← G + 1
16: escreva G + B + (2×F)
```

Respostas

1.	2.	3.	SOMA →
4.	5.	6.	SOMA →
7.	8.	9.	SOMA →
10.	11.	12.	SOMA →
13.	14.	15.	SOMA →

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