

Ejercicios para practicar bucles anidados

RECORDATORIOS SOBRE COMO RESOLVER EJERCICIOS DE BUCLES ANIDADOS

- Antes de comenzar a dibujar nuestro algoritmo debemos separar en los diferentes sumatorios y productorios que hay en la fórmula. Además, debemos encontrar los parámetros de entrada.
- Los **sumatorios** se inician en 0
- Los **productorios** se inician en 1
- El número de bucles for equivaldrá al número total de sumatorios y productorios.

30 FÓRMULAS PARA RESOLVER

1.

$$S = \sum_{i=1}^n \prod_{j=1}^m (i + j^2)$$

2.

$$T = \prod_{i=1}^n \left(\sum_{j=1}^i (j + i^2) \right)$$

3.

$$P = \prod_{i=1}^n \prod_{j=1}^m (i - j)$$

4.

$$S = \sum_{i=1}^n \sum_{j=1}^i \prod_{k=1}^j (i + j - k)$$

5.

$$T = \prod_{i=1}^n \sum_{j=1}^i \prod_{k=1}^j (k - i + j)$$

6.

$$S = \sum_{i=1}^n \prod_{j=1}^m \left(\sum_{k=1}^j (i + k - j) \right)$$

7.

$$P = \prod_{i=1}^n \prod_{j=i}^n (j - i)$$

8.

$$S = \sum_{i=1}^n \prod_{j=1}^m (j + i^3)$$

9.

$$T = \prod_{j=1}^m \sum_{i=1}^j \prod_{k=1}^i (k^2 - i)$$

10.

$$S = \sum_{i=1}^n \prod_{j=1}^m \left(\sum_{k=1}^j (i + k \cdot j) \right)$$

11.

$$S = \sum_{i=1}^n \prod_{j=1}^m \prod_{k=1}^j (i + j + k)$$

12.

$$T = \prod_{i=1}^n \sum_{j=1}^m \prod_{k=j}^n (i - j + k)$$

13.

$$P = \prod_{i=1}^n \prod_{j=1}^i (i^2 + j^2)$$

14.

$$S = \sum_{i=1}^n \prod_{j=1}^m \prod_{k=1}^j (j - k + i)$$

15.

$$T = \prod_{i=1}^n \prod_{j=1}^m \left(\sum_{k=1}^j (k + i^2) \right)$$

16.

$$S = \sum_{i=1}^n \sum_{j=i}^n \prod_{k=j}^n (k - i)$$

17.

$$T = \prod_{i=1}^n \prod_{j=i}^m (i + j + 2)$$

18.

$$S = \sum_{i=1}^n \prod_{j=i}^m \sum_{k=1}^j (k + i - j)$$

19.

$$P = \prod_{i=1}^n \prod_{j=i}^m \prod_{k=1}^j (i + j - k)$$

20.

$$T = \prod_{j=1}^m \prod_{i=1}^j (j - i + 1)$$

21.

$$S = \sum_{i=1}^n (-1)^i \prod_{j=1}^m (j + i^2)$$

22.

$$T = \prod_{i=1}^n (-1)^i \sum_{j=1}^m \prod_{k=1}^j (k + i - j)$$

23.

$$S = \sum_{i=1}^n (-1)^i \prod_{j=1}^i (i + j)$$

24.

$$P = \prod_{i=1}^n (-1)^i \prod_{j=i}^m (i^2 - j^2)$$

25.

$$S = \sum_{i=1}^n \prod_{j=1}^m ((-1)^j (i + j))$$

26.

$$S = \sum_{i=1}^n \prod_{j=i}^m \left(\sum_{k=i}^j (k - i) \right)$$

27.

$$P = \prod_{i=1}^n \sum_{j=i}^m \prod_{k=j}^n (k + i - j)$$

28.

$$T = \prod_{i=1}^n \prod_{j=i}^n \sum_{k=j}^m (k^2 - i^2)$$

29.

$$S = \sum_{i=1}^n \prod_{j=i}^m \prod_{k=j}^n (i + j - k)$$

30.

$$P = \prod_{i=1}^n \prod_{j=i}^m \prod_{k=j}^n (i \cdot j - k)$$