

$1+2+3+4+\dots+n = \text{Série de GAUSS}$

$$G(n)$$

$$G(5) = \underbrace{1+2+3+4+5}_{G(4)} = 15 \quad G(5) = G(4) + 5$$

$$G(4) = \underbrace{1+2+3+4}_{G(3)} = \underbrace{G(3) + 4}_{\text{red circle}}$$

$$G(3) = \underbrace{1+2+3}_{G(2)} = G(2) + 3$$

$$G(2) = \underbrace{1+2}_{G(1)} = G(1) + 2$$

$$\text{Si } n = 1$$

$$G(n) = 1$$

$$\boxed{G(1) = 1}$$

condition de base

$$G(5) = 5 + \underbrace{10}_{4+6} = 15$$

$$5 + 4 + \underbrace{6}_{3+3} = 15$$

$$5 + 4 + 3 + \underbrace{3}_{1+2} = 15$$

$$5 + 4 + 3 + 2 + \underbrace{1}_{G(1)} = 15$$

15

$$G(n) = n + G(n-1)$$

$$\text{factorial}(5) = \underbrace{1 \times 2 \times 3 \times 4}_{\text{fac}(4)} \times 5$$

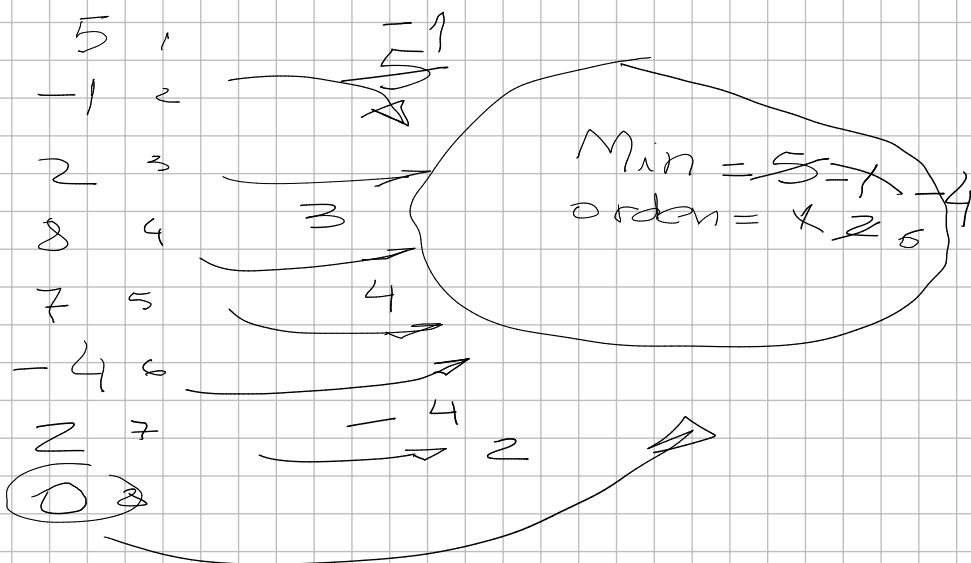
$$\text{fact } x \begin{cases} \text{if } x = 0 \\ x * \text{fact}(x-1) \end{cases}$$

$$4 \times \text{fac}(3)$$

$$3 \times \text{fac}(2)$$

$$2 \times \text{fac}(1)$$

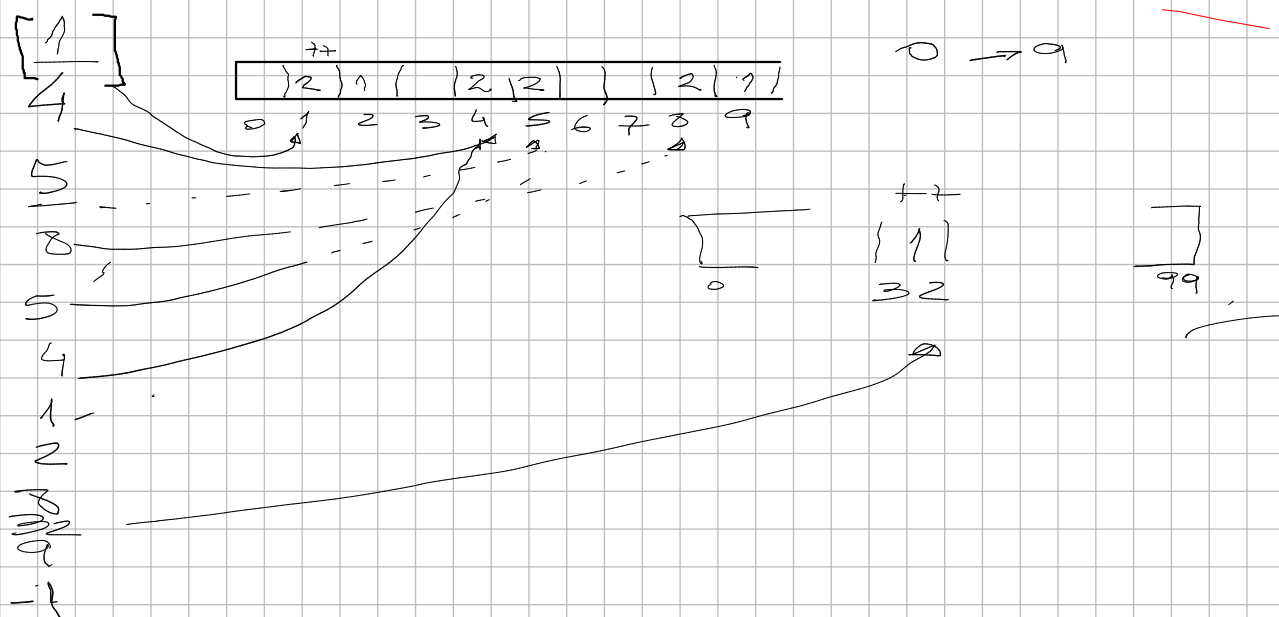
$$\text{fact}(1) = 1 \times \text{fact}(0) = 1$$



Fin

$$\text{Min} = -4$$

$$\text{orden} = 6$$



Stack

+leap

numeros  
47000



int [] numeros;  
numeros = new int[100]

