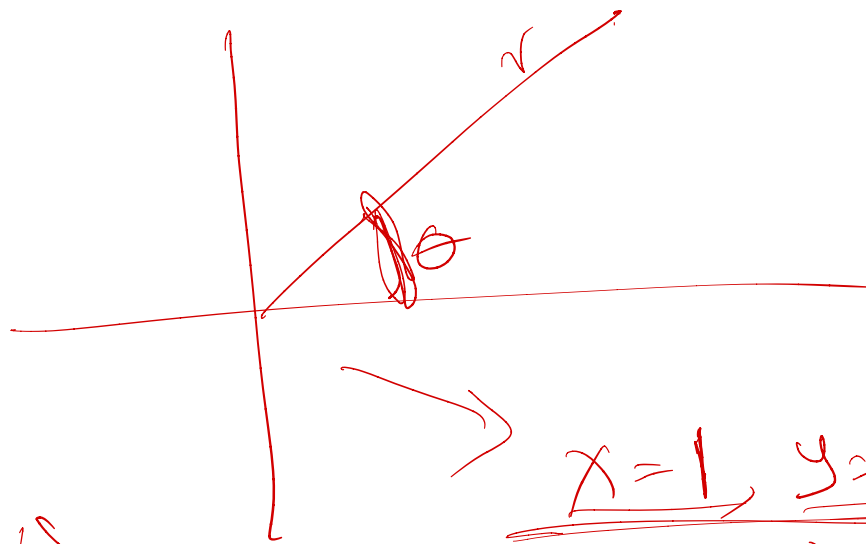


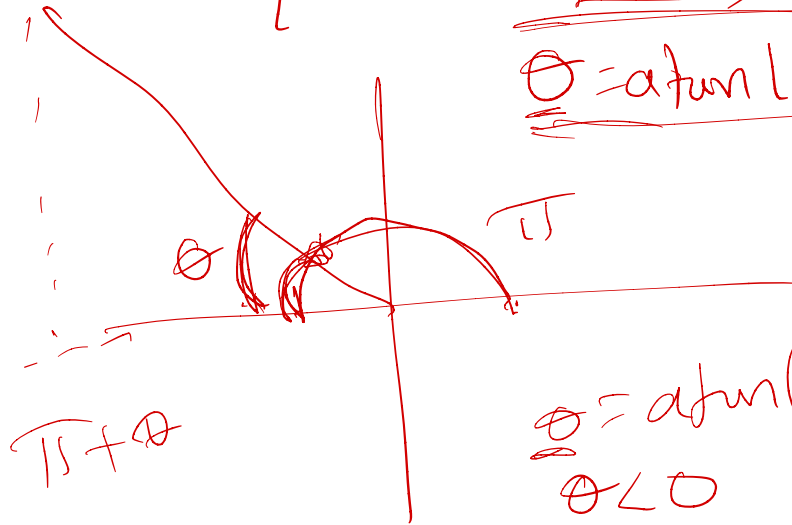
$$\begin{cases} r = \sqrt{x^2 + y^2} \\ \theta = \arctan\left(\frac{y}{x}\right) \end{cases}$$

$$(x, y) \rightarrow (r, \theta)$$



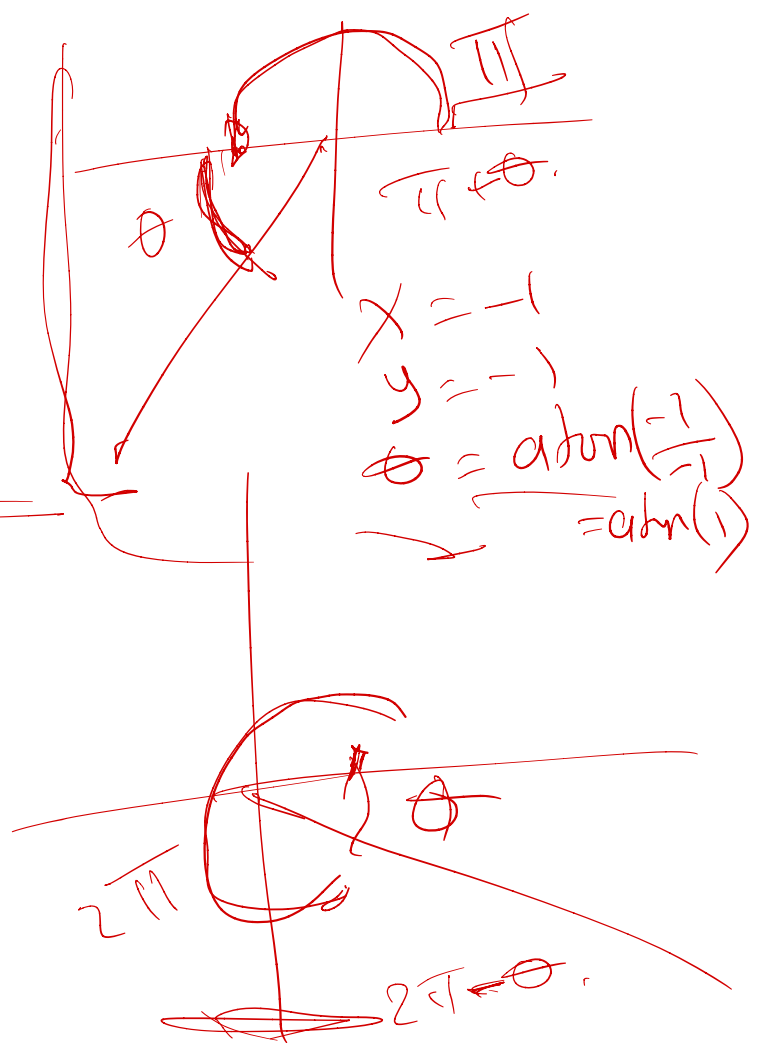
$$\underline{x=1, y=1}$$

$$\underline{\theta = \arctan(1)}$$



$$\theta = \arctan\left(\frac{-1}{1}\right)$$

$$\theta < 0$$



Entradas:

- Leer  $x, y$

Pseudocódigo

Operaciones:

- calcular  $r = \text{sqrt}(x^2 + y^2)$
- calcular  $\theta_{\text{eta}} = \text{atan}(y/x)$
- Si  $x > 0$  y  $y > 0$ :  
    ir a salidas
- Si no: Si  $x < 0$ :  
     $\theta_{\text{eta}} = \theta_{\text{eta}} + \pi$   
    ir a salidas
- Si no:  
     $\theta_{\text{eta}} = \theta_{\text{eta}} + 2\pi$   
    ir a salidas.

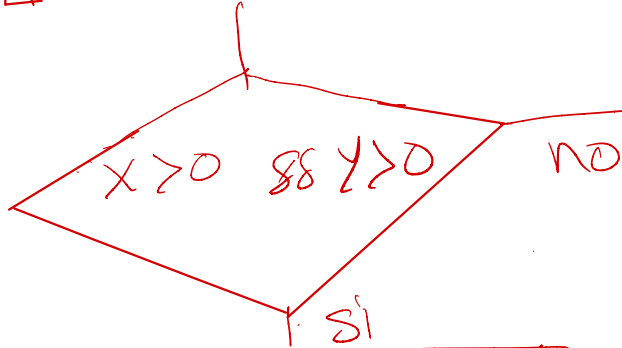
Salidas

Imprime  $r, \theta_{\text{eta}}$ .

Inicio

Leer  $x, y$

$r = \text{sqrt}(x \times x + y \times y)$   
 $\text{theta} = \text{atan}(y/x)$



Escribir  $r, \text{theta}$

