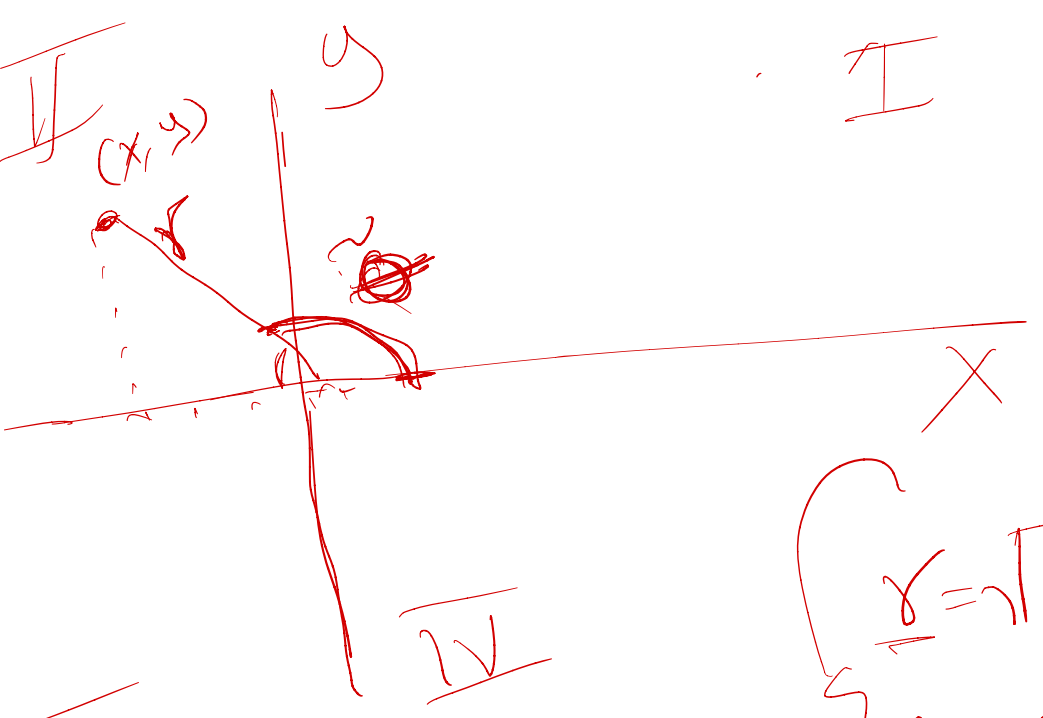
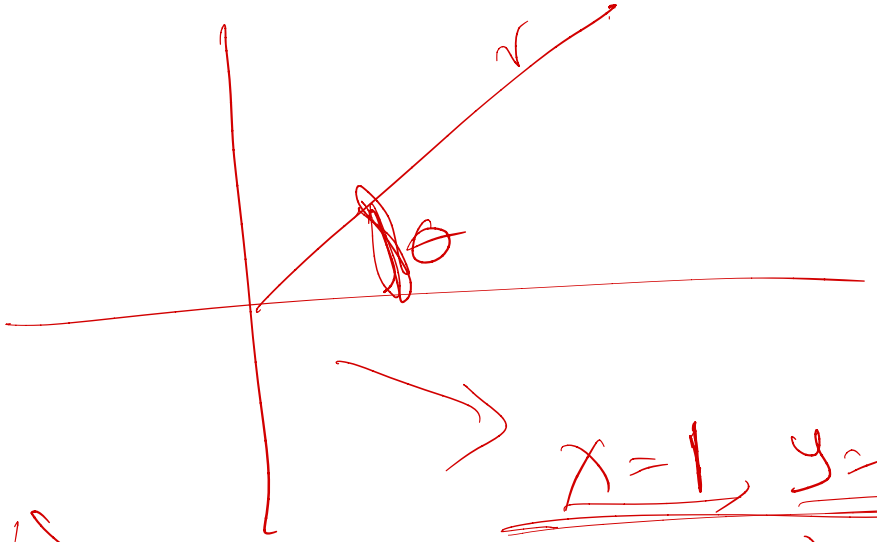


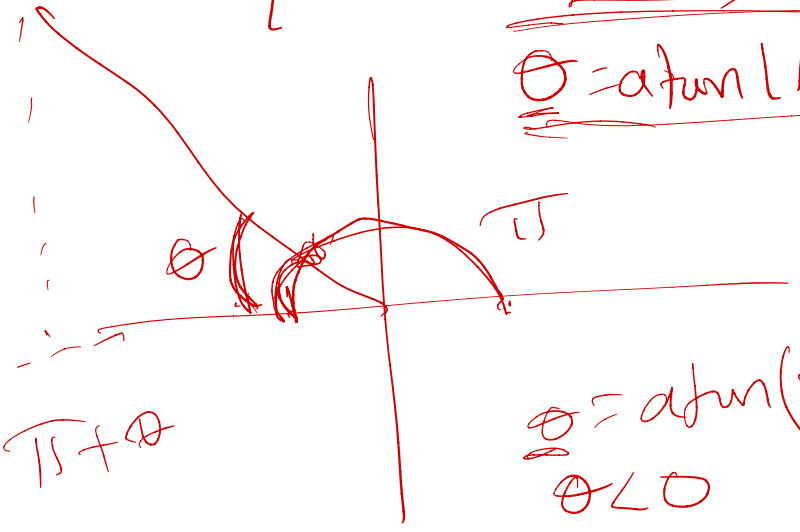
$$(x, y) \rightarrow (r, \theta)$$

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

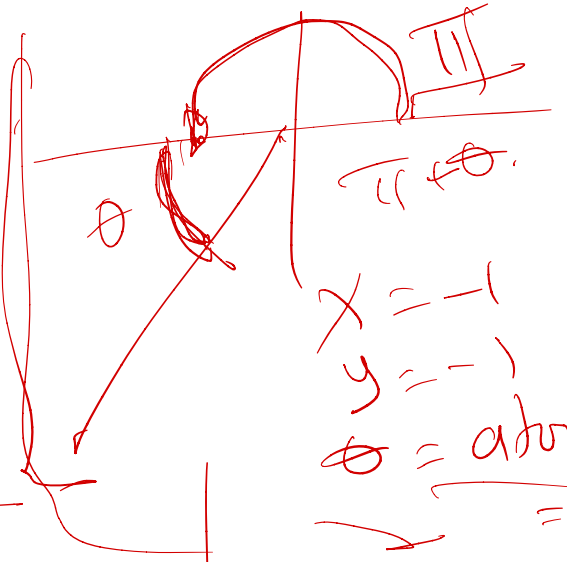


$x = 1, \quad y = 1$

$\theta = \arctan(1)$



$\pi + \theta$



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

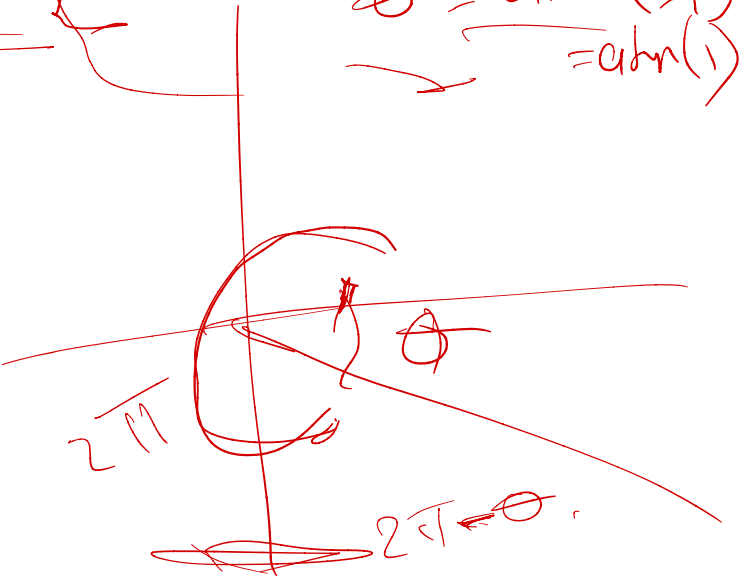
$\theta < 0$

$x = -1$

$y = -1$

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

$= \arctan(1)$



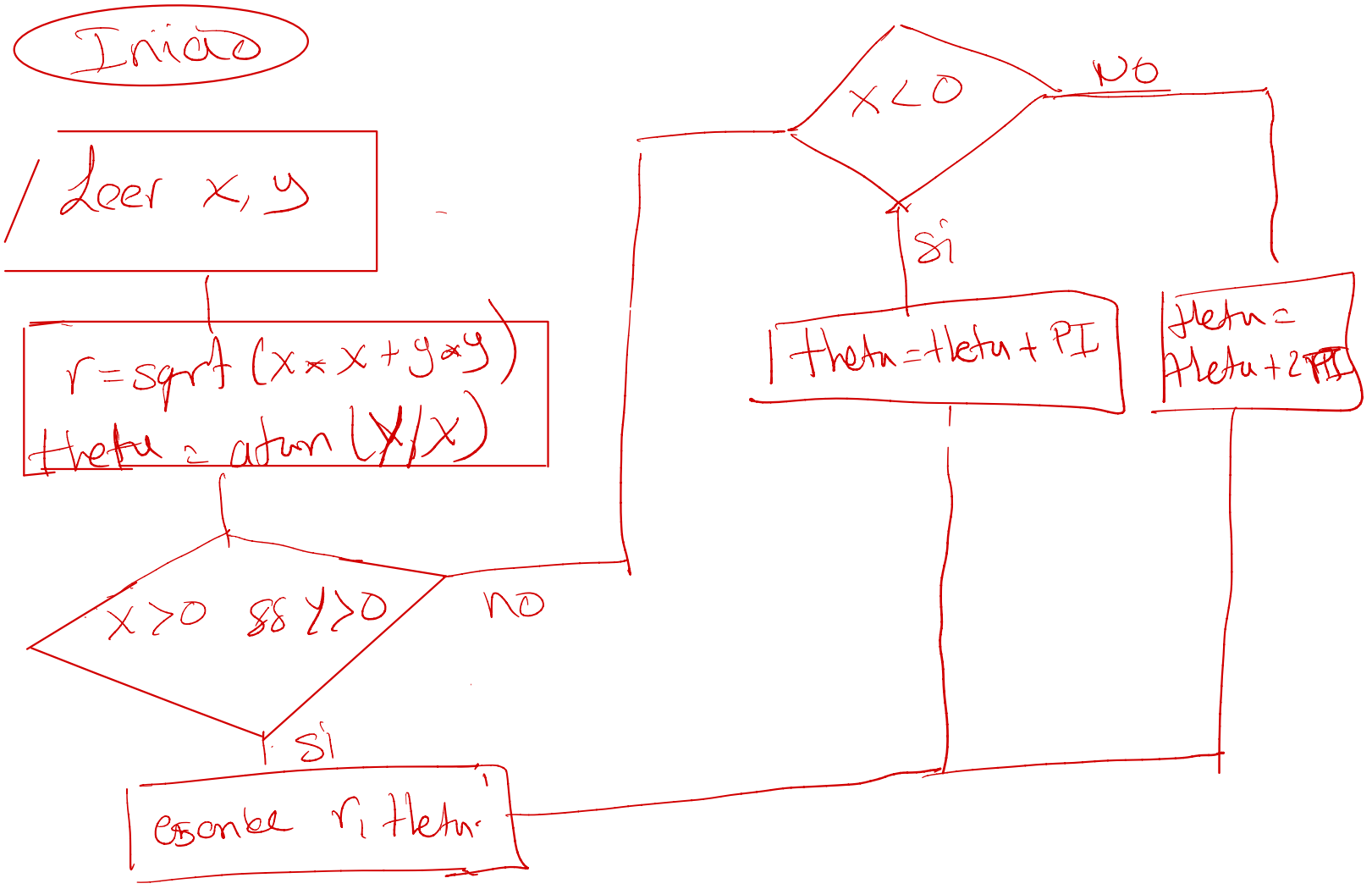
$2\pi + \theta$

Pseudocódigo

Entrada:
- Leer x, y

Operaciones:
- calcular r = sqrt(x*x + y*y)
- calcular theta = atan(y/x)
- si x > 0 && y > 0:
  ir a salida
- si no: si x < 0:
  theta = theta + PI
  ir a salida.
- si no:
  theta = theta + 2PI
  ir a salida.

Salida
Imprime r, theta.


Inicio
Leer x, y
r = sqrt (x*x + y*y)
theta = atan (Y/X)
X>0 && Y>0
NO
SI
X<0
NO
SI
theta = theta + PI
theta = theta + 2PI
escribe r, theta