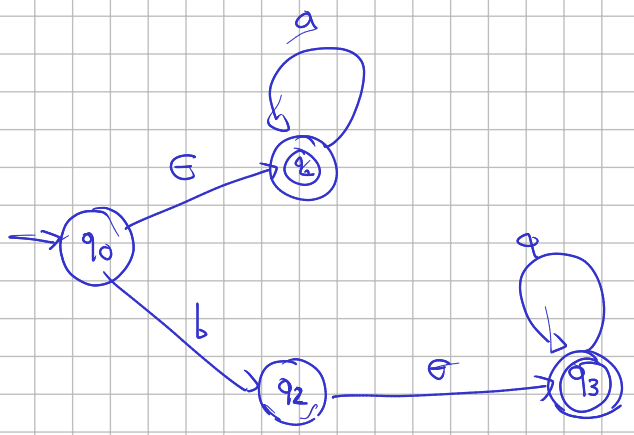
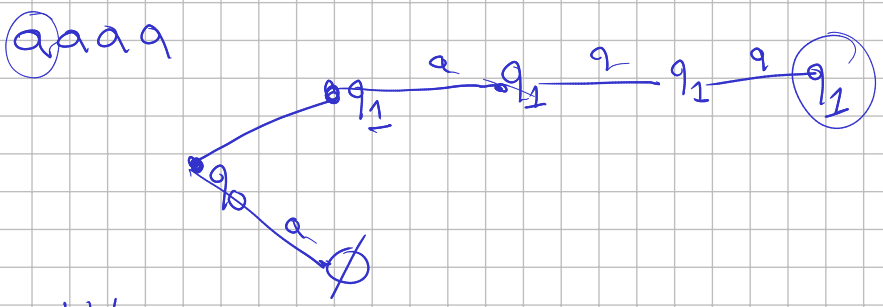
AFN-ϵ



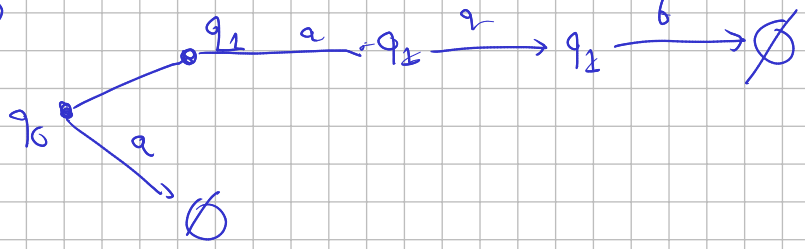
$a^* \cup ba^*$

q_i	a	b	ϵ
q_0	∅	q_2	$\{q_0, q_1\}$
q_1	q_1	∅	q_1
q_2	∅	∅	$\{q_2, q_3\}$
q_3	q_3	∅	q_3

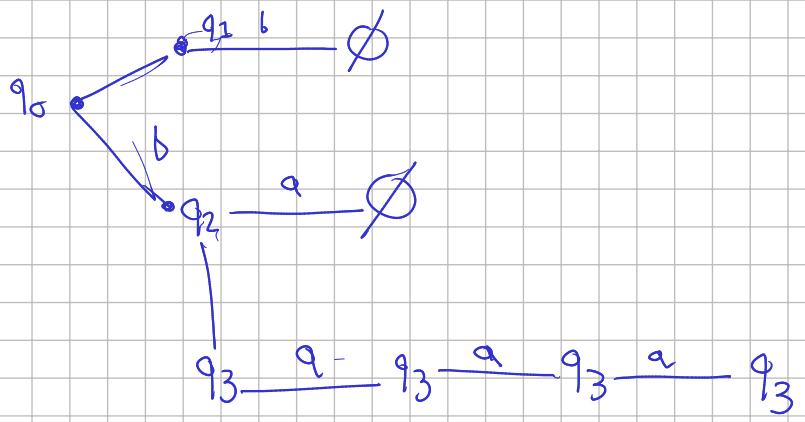
aaaa



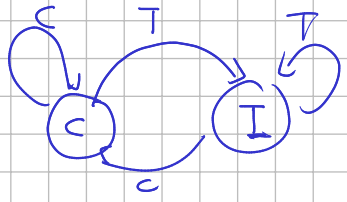
aabbb



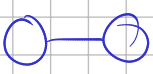
baaa



TET por TAT



Dilema del prisionero



Usted y su amigo han sido capturados y han sido colocados en dos habitaciones separadas, ustedes tienen una elección pueden Cooperar o Traicionar
Si ambos cooperan les dan 2 años de carcel a ambos y si ambos traicionan les dan 5 años a ambos, pero si usted coopera y su amigo traiciona, a usted le dan 5 años y su amigo sale libre (viceversa)

Verificación de algoritmos

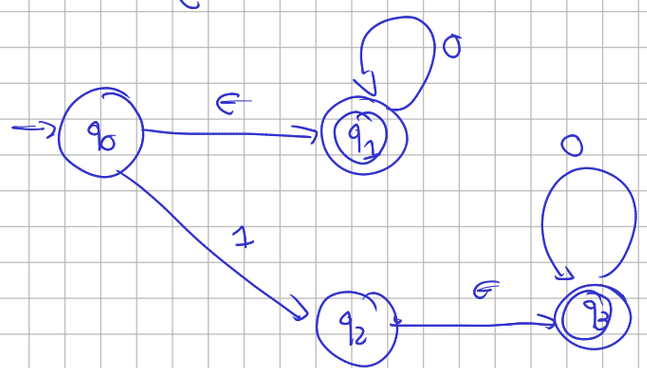
for i in range(0, 10)

Reconocimiento de expresiones regulares
--> Librerias re, regex (automata, reglas) mirar si una texto cumple o una expresión regular o no

AFN$_\epsilon$ ⟶ AFN

$\Sigma = \{0, 1\}$

$0^* \cup 10^*$

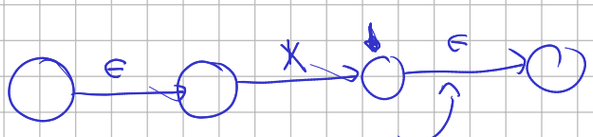


$\epsilon\text{-c}(q_0) = \{q_0, q_1\}$
$\epsilon\text{-c}(q_1) = \{q_1\}$
$\epsilon\text{-c}(q_2) = \{q_2, q_3\}$
$\epsilon\text{-c}(q_3) = \{q_3\}$

$\delta(q_0, 0) = \emptyset$
$\delta(q_0, 1) = \{q_2\}$
$\delta(q_1, 0) = \{q_1\}$
$\delta(q_1, 1) = \emptyset$
$\delta(q_2, 0) = \emptyset$
$\delta(q_2, 1) = \emptyset$
$\delta(q_3, 0) = q_3$
$\delta(q_3, 1) = \emptyset$

$\delta(\epsilon\text{-c}(q_0), 0) = \{q_1\}$
$\delta(\epsilon\text{-c}(q_0), 1) = \{q_2\}$
$\delta(\epsilon\text{-c}(q_1), 0) = \{q_1\}$
$\delta(\epsilon\text{-c}(q_1), 1) = \emptyset$

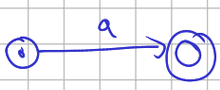
$\delta(\epsilon\text{-c}(q_2), 0) = \{q_3\}$
$\delta(\epsilon\text{-c}(q_2), 1) = \emptyset$
$\delta(\epsilon\text{-c}(q_3), 0) = \{q_3\}$
$\delta(\epsilon\text{-c}(q_3), 1) = \emptyset$



$\epsilon\text{-c}(\delta(\epsilon\text{-c}(q_0), 0)) = \{q_1\}$
$\epsilon\text{-c}(\delta(\epsilon\text{-c}(q_0), 1)) = \{q_2, q_3\}$
$\epsilon\text{-c}(\delta(\epsilon\text{-c}(q_1), 0)) = \{q_1\}$
$\epsilon\text{-c}(\delta(\epsilon\text{-c}(q_1), 1)) = \emptyset$

$\epsilon\text{-c}\{\delta(\epsilon\text{-c}(q_2), 0)\} = \{q_3\}$
$\epsilon\text{-c}\{\delta(\epsilon\text{-c}(q_2), 1)\} = \emptyset$
$\epsilon\text{-c}\{\delta(\epsilon\text{-c}(q_3), 0)\} = \{q_3\}$
$\epsilon\text{-c}\{\delta(\epsilon\text{-c}(q_3), 1)\} = \emptyset$

a



a|b

r^*