





INSTITUTO TECNOLOGICO DE IZTAPALAPA

INGENERIA EN SISTEMAS COMPUTACIONALES

Lenguajes y autómatas 2
Practicas
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Practicas

Capitulo 2

1.

a)
$$\Sigma = \{a, b\}$$

$$Q = \{ s_0, s_1, s_2, f \}$$

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

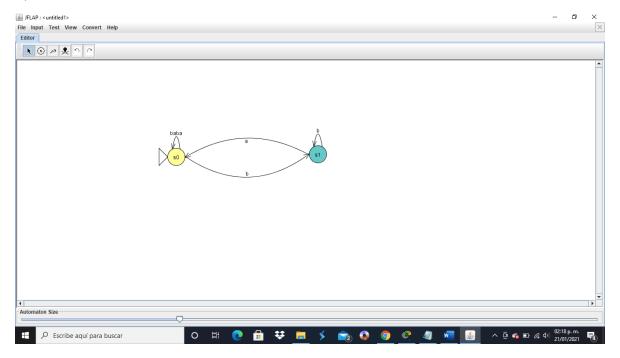
$$Q = \{ s_0, s_1, s_2, s_3, s_4, f \}$$

c) a)
$$\sum \{a, b\}$$

$$Q = \{ s_0, s_1, s_2, s_3, s_4, s_5, s_6, f \}$$

2.

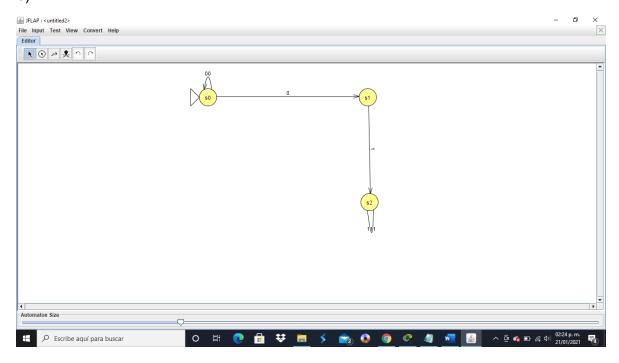
a) baba



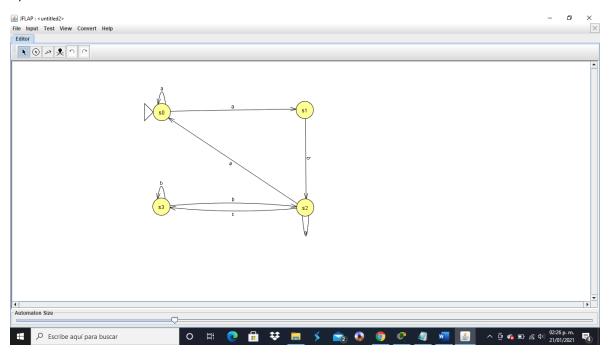




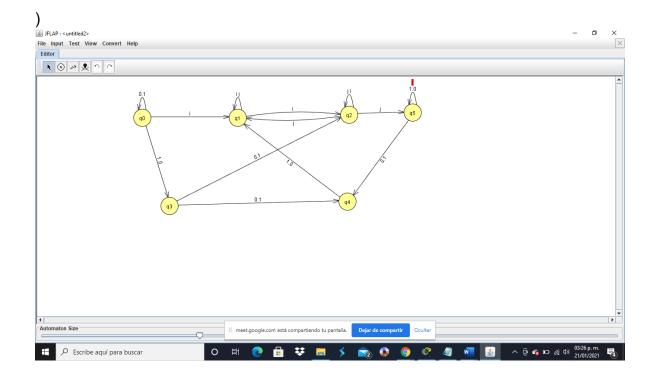
b)



c)







4)

a)
$$E.R=(0-9^*)id^* + (0-9)\backslash H^*$$

b)
$$E.R = (0 - 9) \backslash W^*$$

c)
$$E.R = (0-9).D^* + (0-9)0.D \times + (0-9)0.0D \times$$

5)

$$a)(0+0)^*1(0+0) + (1+1)^*1(1+1)(1+1)$$

$$b)(0+1)^*1(0+1)^* + (0+1) + 1^*(0+1)(0+1)$$

c)
$$L = (abcdfg) + (hijklmn) + (opqrstu) + (vwxyz)$$

$$d)(xyzwy) + (x) + (y)^* + (xy) + (z) + (wy)^* + (wxyz^*)$$

e)
$$w = (0-9)^* + (1,3)d + (t-^* \setminus) + (\setminus d^*) +$$



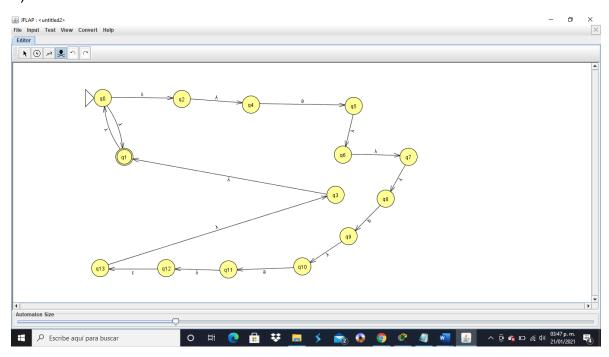
6)

b)
$$(b \setminus *) + (z)$$

c)
$$L = \{A, Z\} + \{a, z\}$$

$$d)(0-9)\backslash d^*\lambda$$

7)

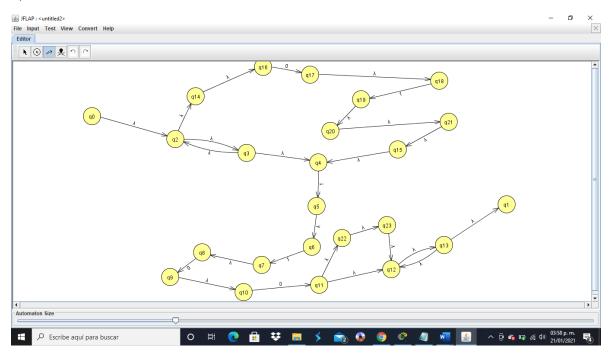


 $(a,b,c)^*\lambda$



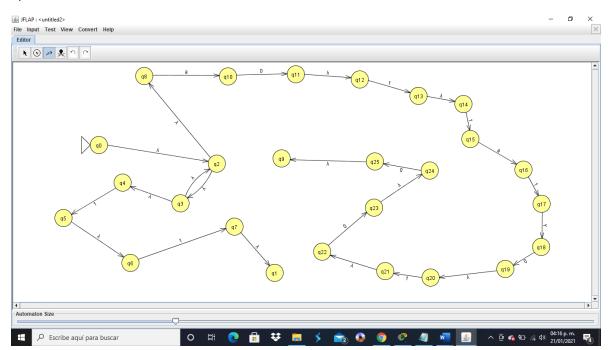


b)



 $(0I1)^* + 01^*$

c)



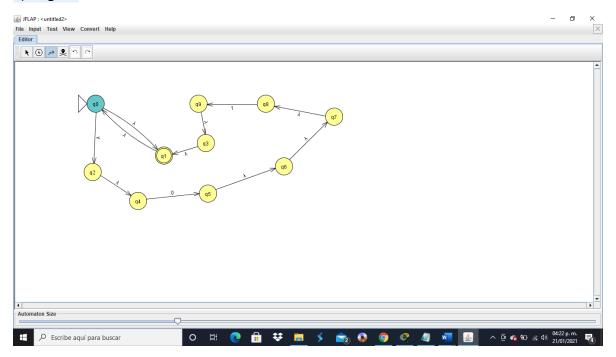
 $1 + (01I10) + 0^*$





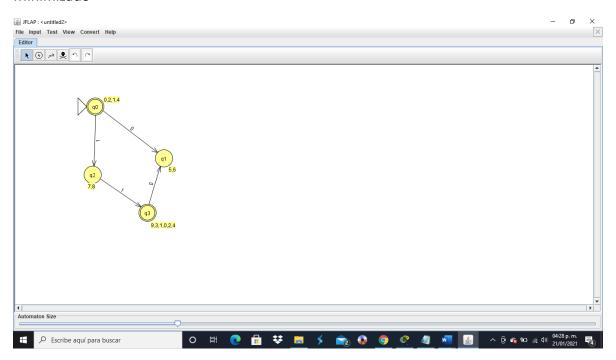
8)

a) original



R= es equivalente

Minimizado

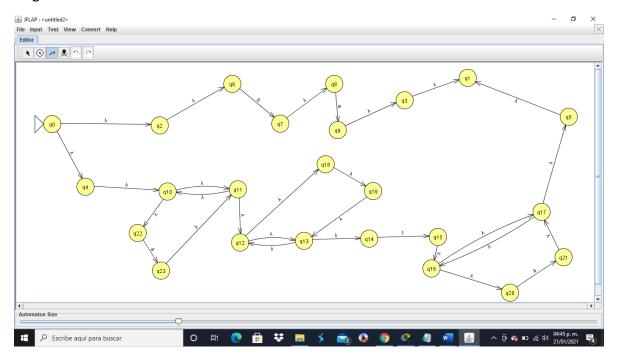




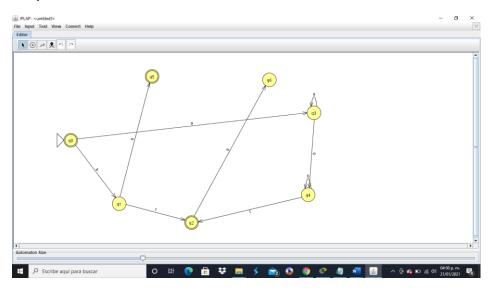


b)

original



Simplificado



R= son equivalentes

9)

a) R= cuando la transacción de dos estados o más sea aceptado por lenguaje