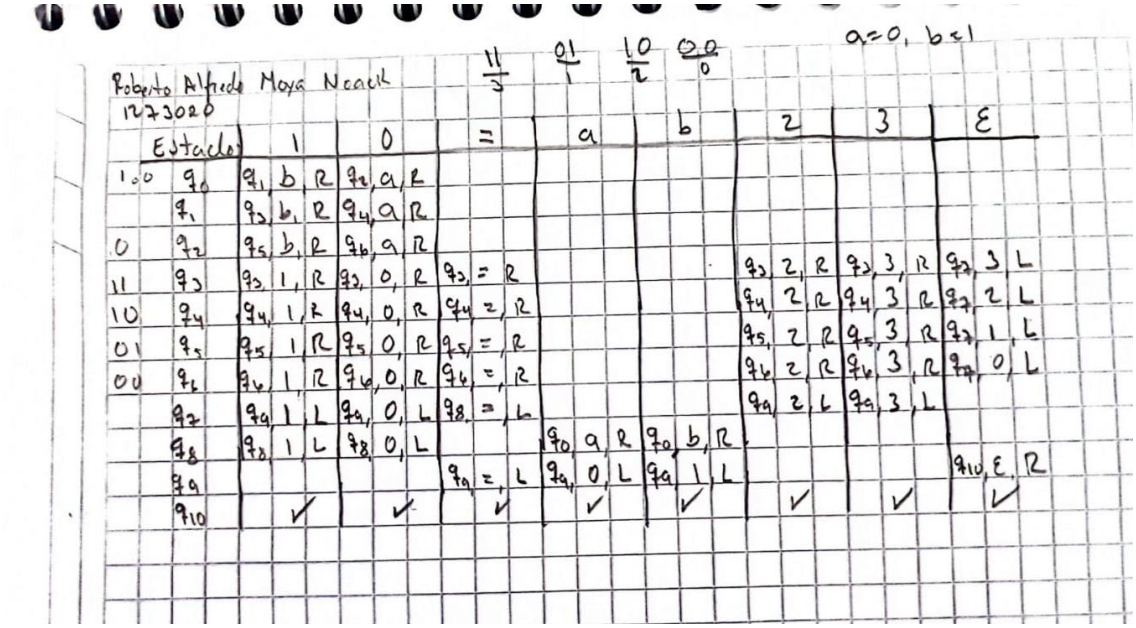
Lenguajes Formales y Autómatas – Sección 01

Alumno: Roberto Alfredo Moya Noack Mayo 3, 2023

Carné: 1273020

Exámen Final

Mi procedimiento. Realicé una tabla para manejar los estados de forma más organizada y sencilla.



Estados:

q_0

{q0, 1} → {q1, b, R}

{q0, 0} → {q2, a, R}

q_1

{q1, 1} → {q3, b, R}

{q1, 0} → {q4, a, R}

q_2

{q2, 1} → {q5, b, R}

{q2, 0} → {q6, a, R}

q_3

{q3, 1} → {q3, 1, R}

{q3, 0} → {q3, 0, R}

{q3, =} → {q3, =, R}

{q3, 2} → {q3, 2, R}

{q3, 3} → {q3, 3, R}

{q3, ε} → {q7, 3, L}

q_4

{q4, 1} → {q4, 1, R}

{q4, 0} → {q4, 0, R}

{q4, =} → {q4, =, R}

{q4, 2} → {q4, 2, R}

{q4, 3} → {q4, 3, R}

{q4, ε} → {q7, 3, L}

q_5

{q5, 1} → {q5, 1, R}

{q5, 0} → {q5, 0, R}

{q5, =} → {q5, =, R}

{q5, 2} → {q5, 2, R}

{q5, 3} → {q5, 3, R}

{q5, ε} → {q7, 1, L}

q_6

{q6, 1} → {q6, 1, R}

{q6, 0} → {q6, 0, R}

{q6, =} → {q6, =, R}

{q6, 2} → {q6, 2, R}

{q6, 3} → {q6, 3, R}

{q6, ε} → {q7, 0, L}

q_7

{q7, 1} → {q9, 1, L}

{q7, 0} → {q9, 0, L}

{q7, =} → {q8, =, L}

{q7, 2} → {q9, 2, L}

{q7, 3} → {q9, 3, L}

q_8

{q8, 1} → {q8, 1, L}

{q8, 0} → {q8, 0, L}

{q8, a} → {q0, a, R}

{q8, b} → {q0, b, R}

q_9

{q9, =} → {q9, =, L}

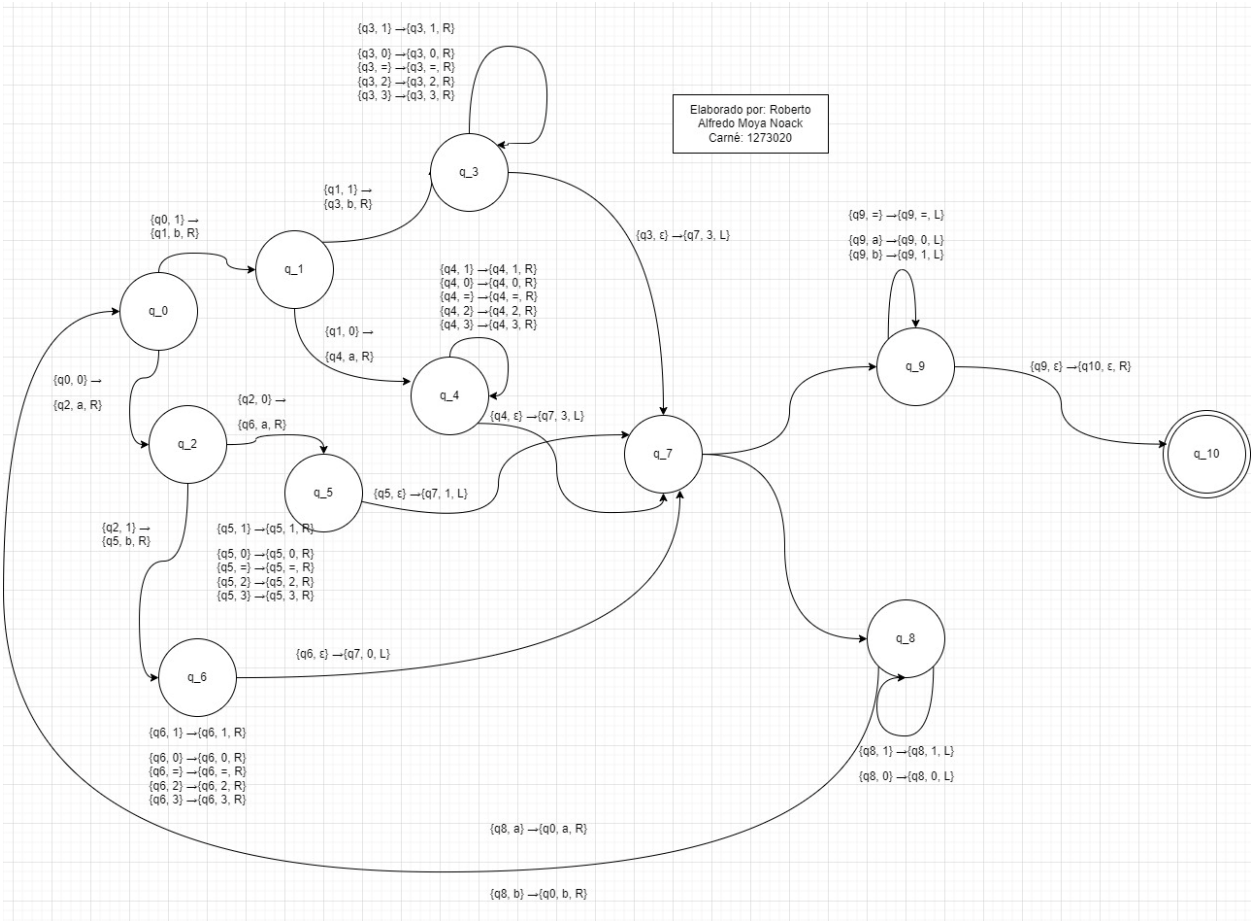
{q9, a} → {q9, 0, L}

{q9, b} → {q9, 1, L}

{q9, ε} → {q10, ε, R}

q_10 → Estado de aceptación.

Automata:


{q3, 1} →{q3, 1, R}
{q3, 0} →{q3, 0, R}
{q3, =} →{q3, =, R}
{q3, 2} →{q3, 2, R}
{q3, 3} →{q3, 3, R}
Elaborado por: Roberto Alfredo Moya Noack
Carné: 1273020
q_3
{q1, 1} →
{q3, b, R}
{q0, 1} →
{q1, b, R}
q_1
{q3, ε} →{q7, 3, L}
{q9, =} →{q9, =, L}
{q9, a} →{q9, 0, L}
{q9, b} →{q9, 1, L}
q_0
{q4, 1} →{q4, 1, R}
{q4, 0} →{q4, 0, R}
{q4, =} →{q4, =, R}
{q4, 2} →{q4, 2, R}
{q4, 3} →{q4, 3, R}
{q1, 0} →
{q4, a, R}
q_4
q_9
{q9, ε} →{q10, ε, R}
{q0, 0} →
{q2, a, R}
{q2, 0} →
{q6, a, R}
{q4, ε} →{q7, 3, L}
q_2
q_7
q_10
q_5
{q5, ε} →{q7, 1, L}
{q2, 1} →
{q5, b, R}
{q5, 1} →{q5, 1, R}
{q5, 0} →{q5, 0, R}
{q5, =} →{q5, =, R}
{q5, 2} →{q5, 2, R}
{q5, 3} →{q5, 3, R}
q_8
{q6, ε} →{q7, 0, L}
q_6
{q6, 1} →{q6, 1, R}
{q6, 0} →{q6, 0, R}
{q6, =} →{q6, =, R}
{q6, 2} →{q6, 2, R}
{q6, 3} →{q6, 3, R}
{q8, 1} →{q8, 1, L}
{q8, 0} →{q8, 0, L}
{q8, a} →{q0, a, R}
{q8, b} →{q0, b, R}