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Implementación de métodos computacionales

10 de sept. de 25

Actividad 4.1: RE & FA

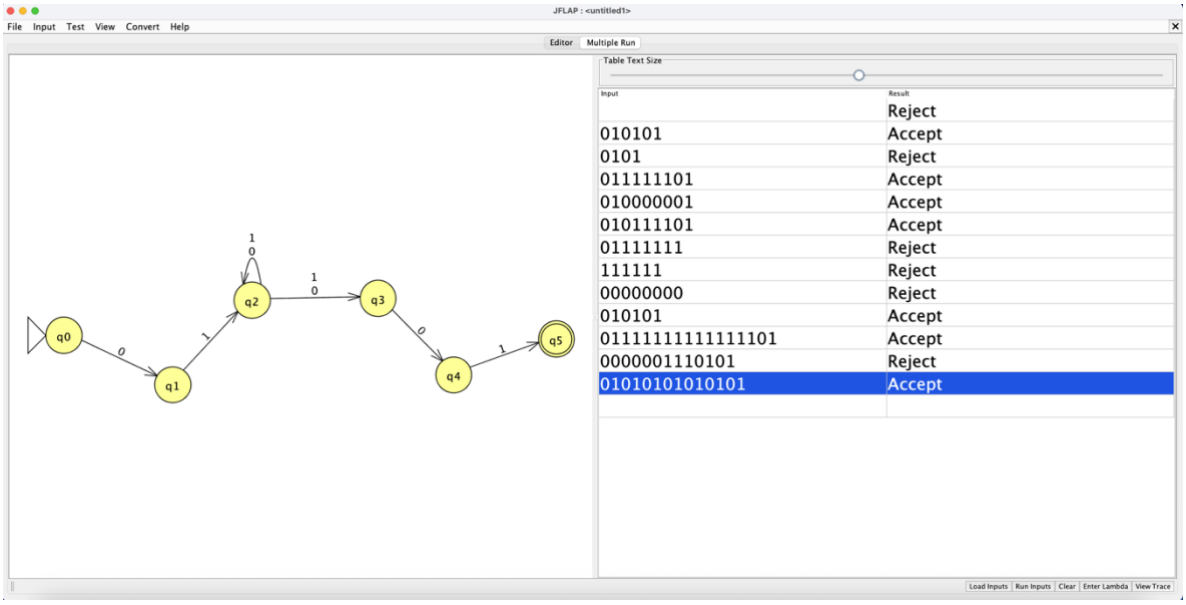
Propósito

Convertir Expresiones Regulares a Autómatas Finitos

Instrucciones

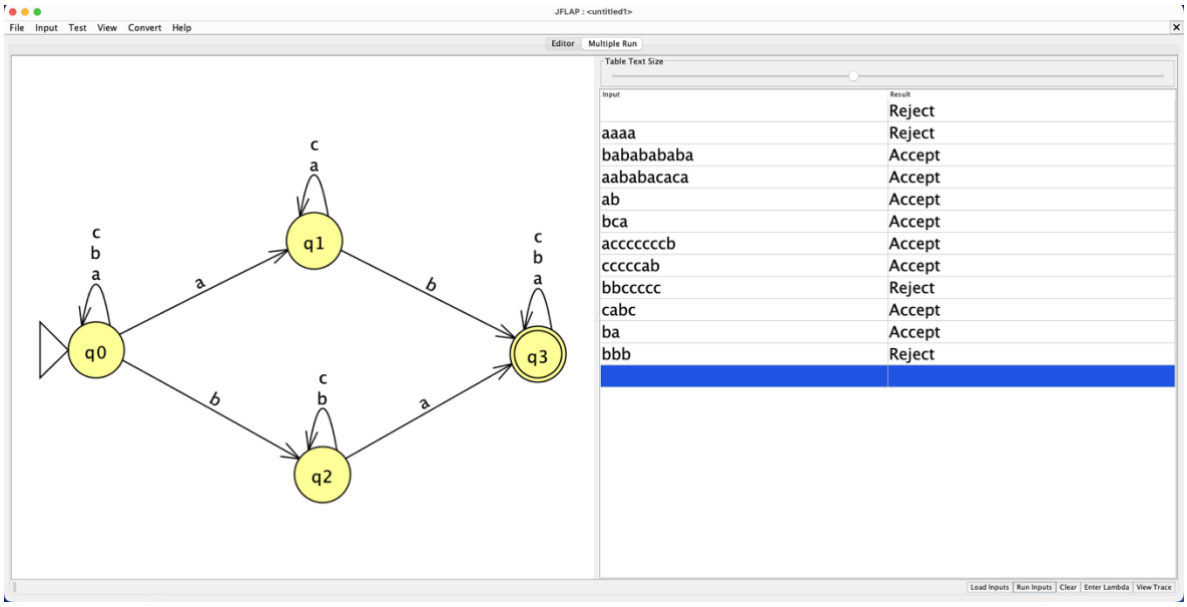
Resuelva los siguientes ejercicios:

1. 01(0 + 1)∗01



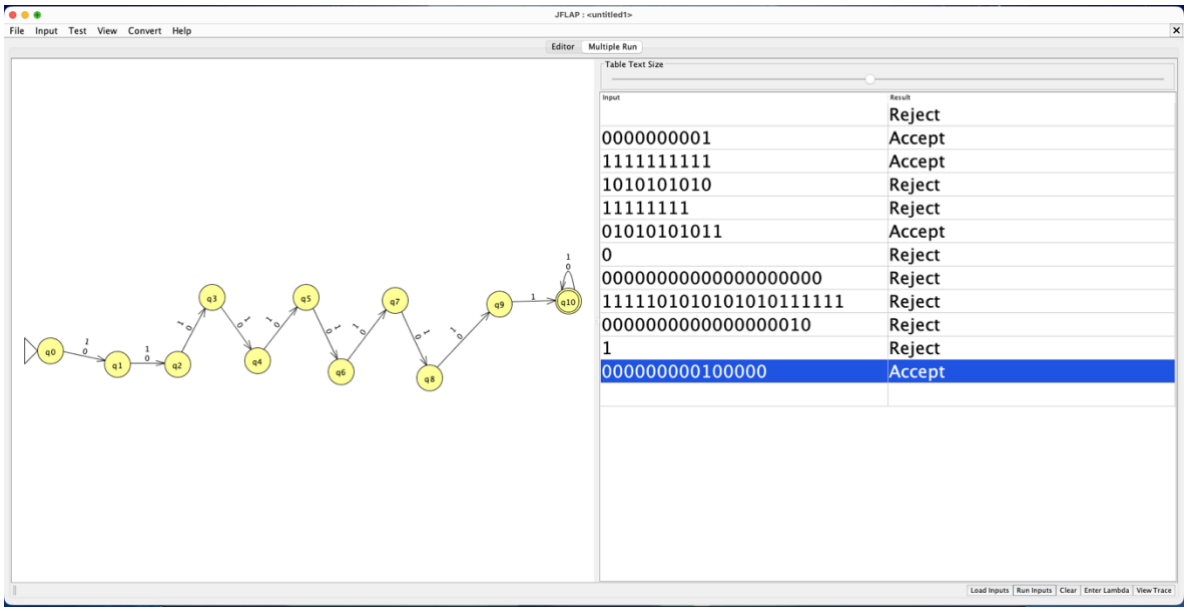
M = ({q0, q1, q2, q3, q4, q5}, {0, 1}, {(q0, 0, q1), (q1, 1, q2), (q2, 0, q2), (q2, 1, q2), (q2, 0, q3), (q2, 1, q3), (q3, 0, q4), (q4, 1, q5)}, q0, {q5})

2. (a+b+c)∗(a(a+b+c)∗b+b(a+b+c)∗a)(a+b+c)∗



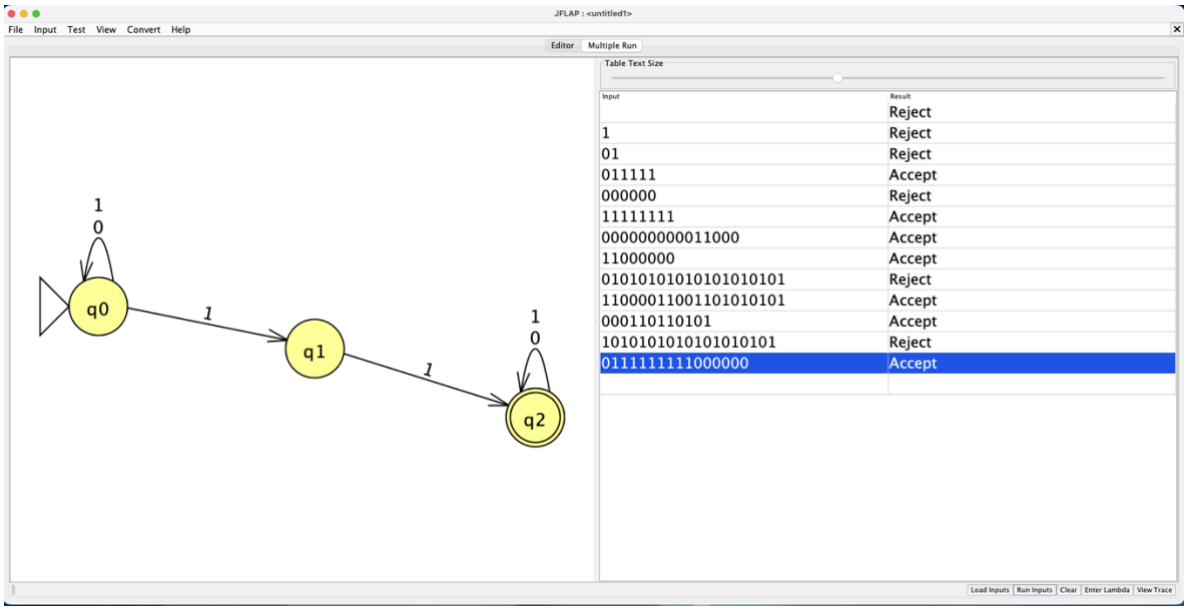
M = ({q0, q1, q2, q3}, {a, b, c}, {(q0, a, q0), (q0, b, q0), (q0, c, q0), (q0, a, q1), (q0, b, q2), (q1, a, q1), (q1, c, q1), (q1, b, q3), (q2, b, q2), (q2, c, q2), (q2, a, q3), (q3, a, q3), (q3, b, q3), (q3, c ,q3)}, q0, {q3})

3. (0 + 1)91(0 + 1)∗



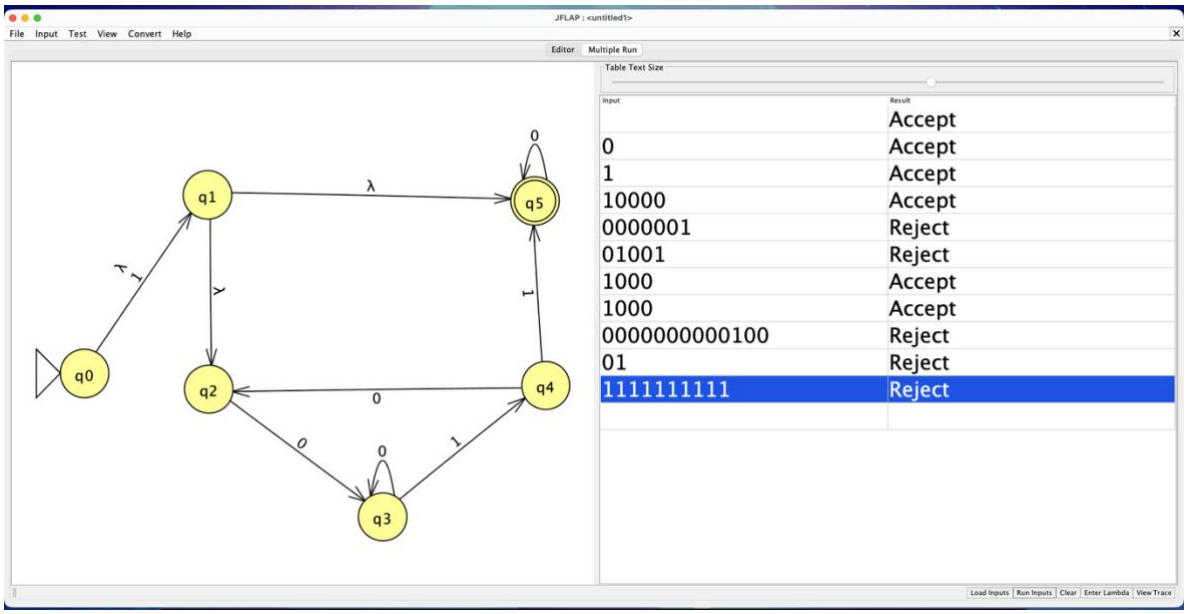
M = ({q0, q1, q2, q3, q4, q5, q6, q7, q8, q9, q10}, {0, 1}. {(q0, 0, q1), (q0, 1, q1), (q1, 0, q2), (q1, 1, q2), (q2, 0, q3), (q2, 1, q3), (q3, 0, q4), (q3, 1, q4), (q4, 0, q5), (q4, 1, q5), (q5, 0, q6), (q5, 1, q6), (q6, 0, q7), (q6, 1, q7), (q7, 0, q8), (q7, 1, q8), (q8, 0, q9), (q8, 1, q9), (q9, 1, q10), (q10, 0, q10), (q10, 1, q10)}, q0, {q10})

4. $(0 + 1)*11(0 + 1)*$



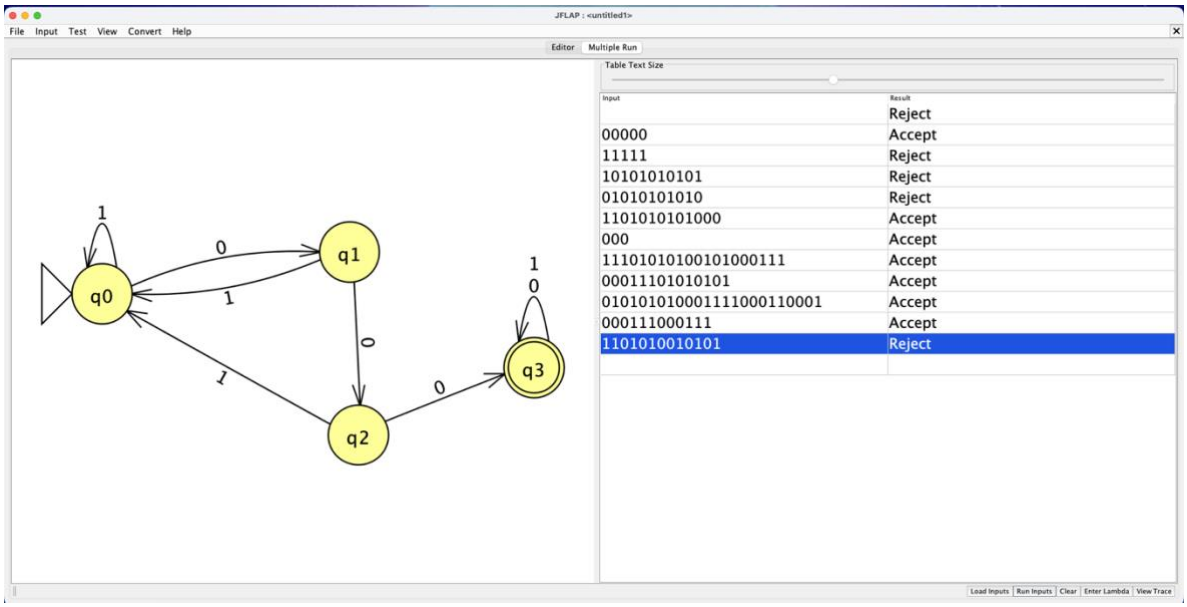
M = ({q0, q1, q2}, {0, 1}, {(q0, 0, q1), (q0, 1, q0), (q0, 1, q1), (q1, 1, q2), (q2, 0, q2), (q2, 1, q2)}, q0, {q2})

5. $(1 + \varepsilon)(00*1)*0*$



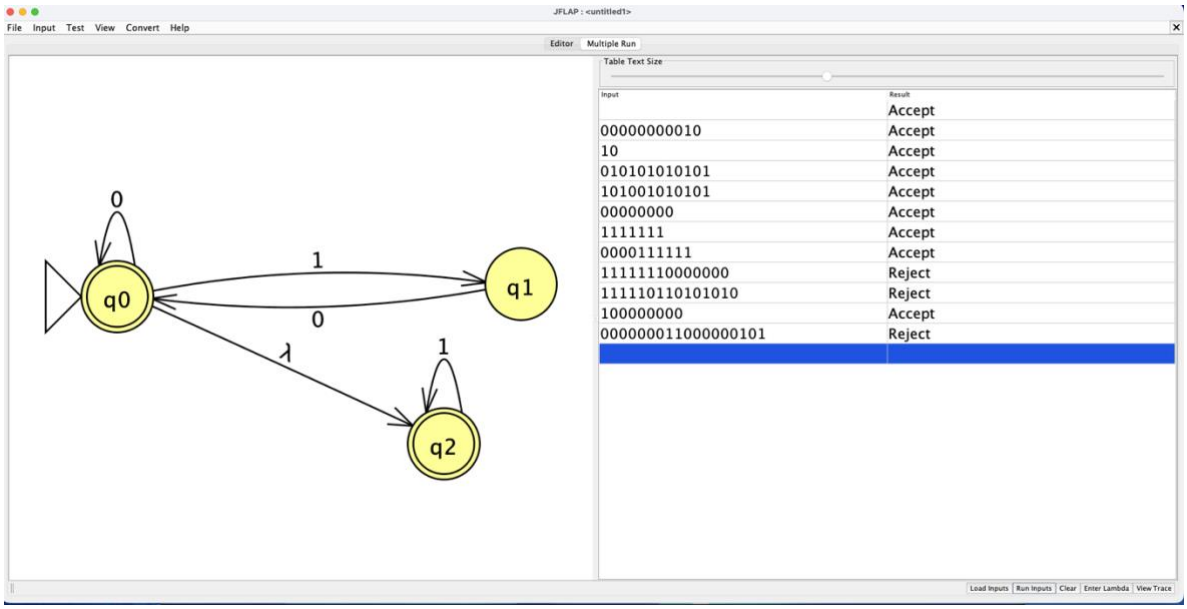
M = ({q0, q1, q2, q3, q4, q5}, {0, 1}, {(q0, ε, q1), (q0, 1, q1), (q1, ε, q2), (q1, ε, q5), (q2, 0, q3), (q3, 0, q3), (q3, 1, q4), (q4, 0, q2), (q4, 1, q5), (q5, 0, q5)}, q0, {q5})

6. (0∗1∗)∗000(0 + 1)∗



M = ({q0, q1, q2, q3}, {0, 1}, {(q0, 0, q1), (q0, 1, q0), (q1, 0, q2), (q1, 0, q0), (q2, 0, q3), (q2, 1, q0), (q3, 0, q3), (q3, 1, q3)}, q0, {q3})

7. (0 + 10)∗1∗



M = ({q0, q1, q2}, {0, 1}, {(q0, 0, q0), (q0, 1, q1), (q0, ε, q2), (q1, 0, q0), (q2, 1, q2)}, q0, {q2})