# PRÁCTICA JFLP SESIÓN 1

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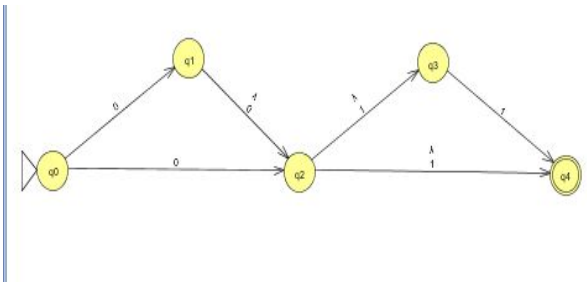
Ejercicio 1.a:
OBTENER EL  AFD EQUIVALENTE:

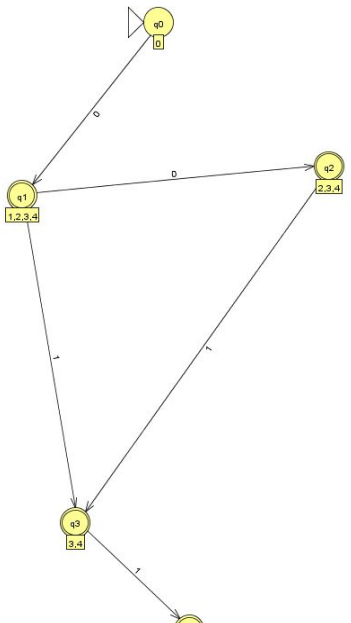
| | **0** | **1** | **λ** | **λ*** | **λ*0λ*** | **λ*1λ*** |
|---|---|---|---|---|---|---|
| **->q0** | q1,q2 | -- | -- | q0 | q1,q2,q3, q4 | -- |
| **q1** | q2 | -- | q2 | q1,q2,q3,q4 | q2,q3,q4 | q3, q4 |
| **q2** | -- | q3,q4 | q3,q4 | q2,q3,q4 | -- | q3, q4 |
| **q3** | -- | q4 | -- | q3 | -- | q4 |
| ***q4** | -- | -- | -- | q4 | -- | -- |

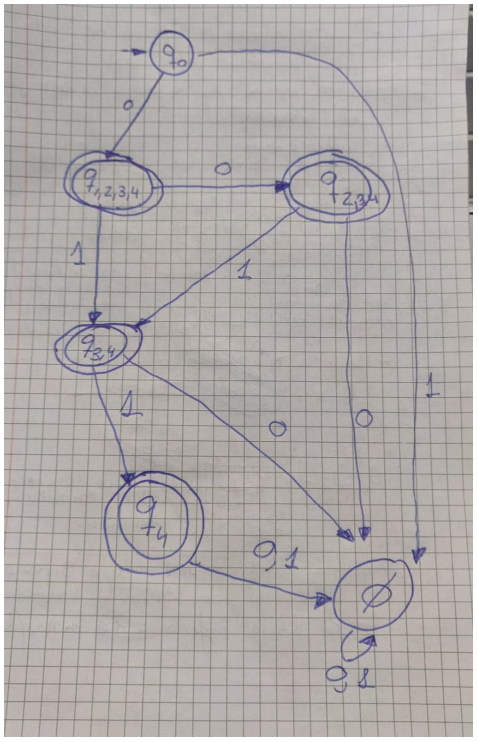
| | **0** | **1** |
|---|---|---|
| **->{q0}** | {q1,q2,q3, q4} | Φ |
| *** {q1,q2,q3, q4}** | {q2} | {q3,q4} |
| ***{q2,q3,q4}** | Φ | {q3,q4} |
| ***{q3,q4}** | Φ | {q4} |
| **{q4}** | Φ | Φ |
| **Φ** | Φ | Φ |

AFND:




AFD EQUIVALENTE:





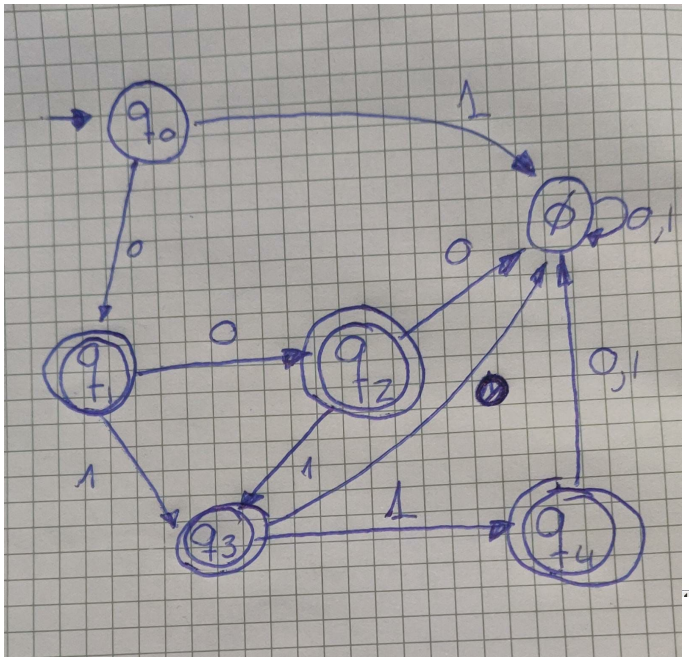

MANUAL

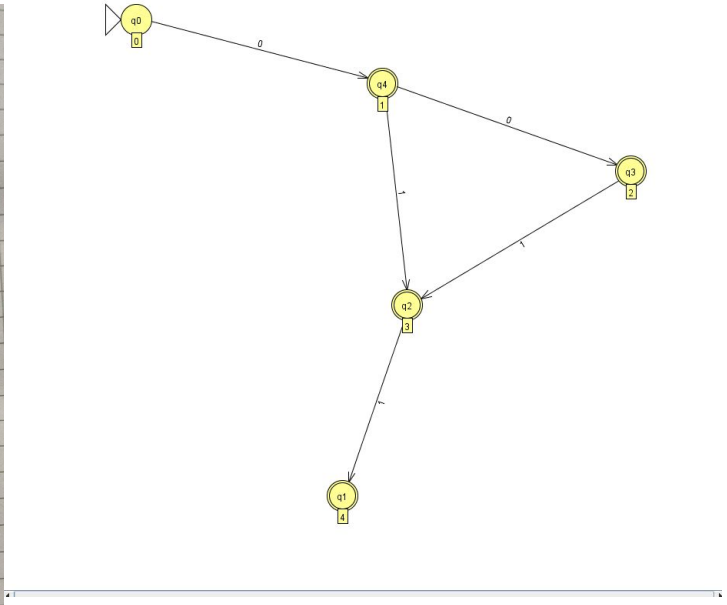
Ejercicio 1.b: Mínimo del AFD equivalente:
q1,2,3,4 = q1
q2,3,4 = q2
q3,4 = q3

| | **0** | **1** | **Q/E1 0** | **Q/E1 1** | **Q/E2 0** | **Q/E2 1** | **Q/E3 0** | **Q/E3 1** |
|---|---|---|---|---|---|---|---|---|
| **->q0** | q1 | Φ | C1 | C1 | C1 | C1 | C1 | C4 |
| ***q1** | q2 | q3 | C1 | C1 | C1 | C3 | C1 | C3 |
| ***q2** | Φ | q3 | C1 | C1 | C1 | C3 | C4 | C3 |
| ***q3** | Φ | q4 | C1 | C2 | -- | -- | -- | -- |
| ***q4** | Φ | Φ | -- | -- | -- | -- | -- | -- |
| **Φ** | Φ | Φ | C1 | C1 | C1 | C1 | C4 | C4 |

Q/E0 = {C1= {q0,q1,q2,q3,Φ}, C2 = {q4}}
Q/E1 = {C1= {q0,q1,q2,Φ}, C2 = {q4}, C3 = {q3}}
Q/E2 = {C1= {q1,q2}, C2 = {q4}, C3 = {q3}, C4={q0,Φ}}
Q/E3 = {C1= {q1}, C2 = {q4}, C3 = {q3}, C4={q0}, C5 ={Φ}, C6 ={q2}}

ES IGUAL AL AFD ANTERIOR, POR TANTO,
EL AFD YA ERA MÍNIMO.

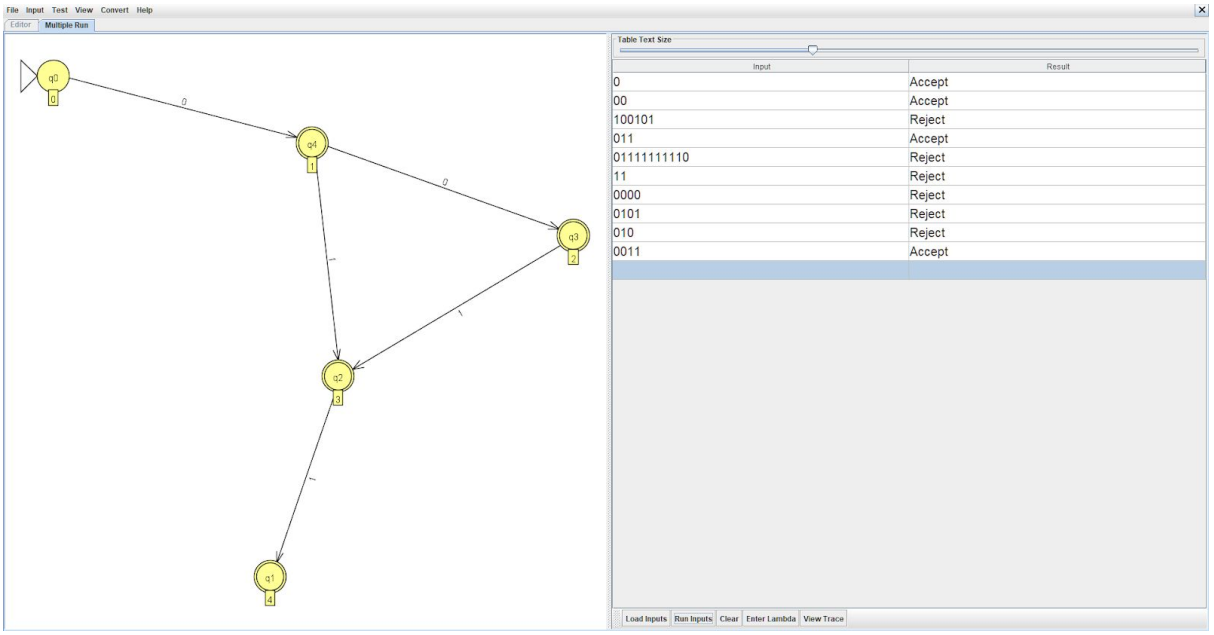




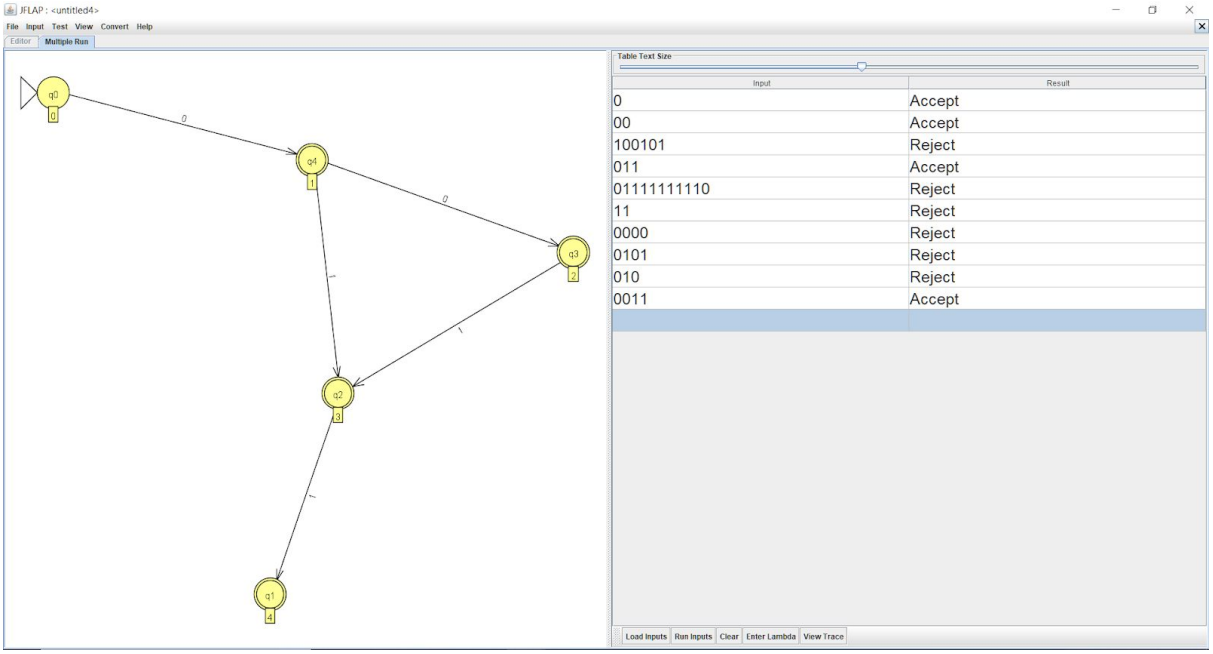

Ejercicio 1.c: Mínimo del AFD equivalente:

El lenguaje que reconocen estos autómatas es **0^m 1^n tal que 1<=m<=2 y 0<=n<=2**

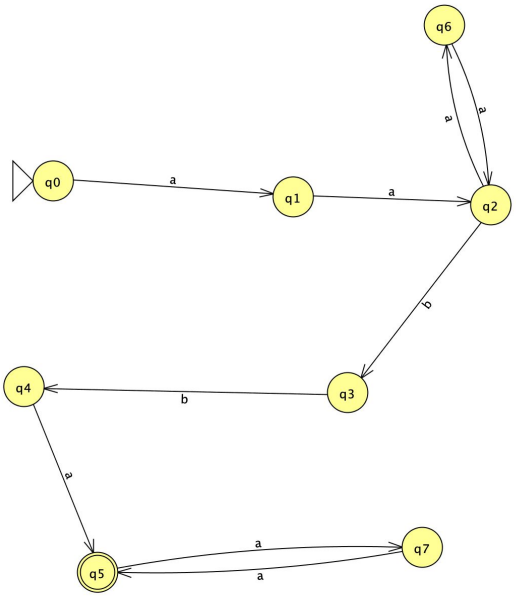
**MÍNIMO TEST**



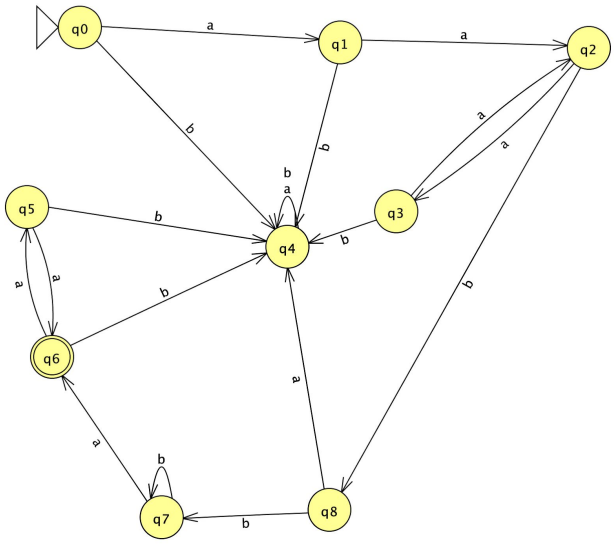
## AFD EQUIVALENTE TEST



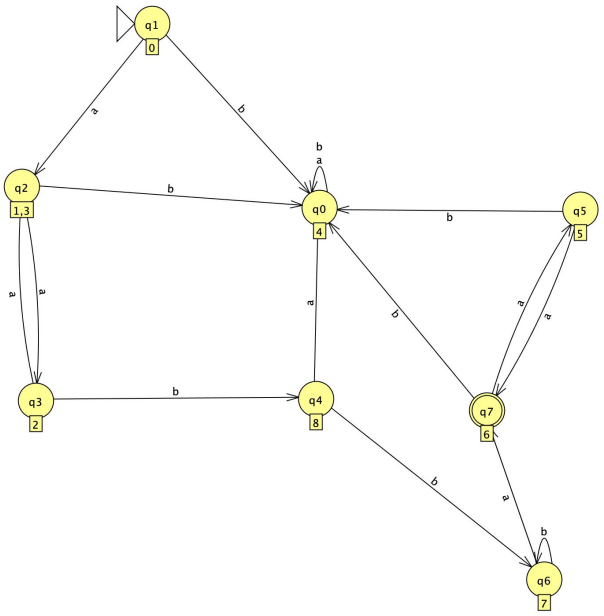

EJERCICIO 2:
AFND:



AFD:




AFD Mínimo:



## TEST LENGUAJE:

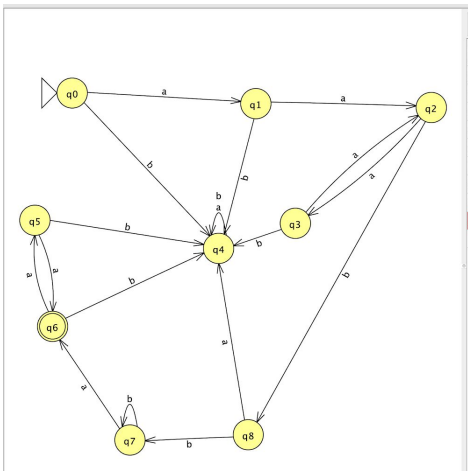



Table Text Size

| Input | Result |
|---|---|
| aabba | Accept |
| aaaabbba | Accept |
| aabbaaa | Accept |
| aaaaaabbaaaaa | Accept |
| aaaaaaaabba | Accept |
| a | Reject |
| bbb | Reject |
| abbaaa | Reject |
| aabbbaa | Reject |
| ab | Reject |

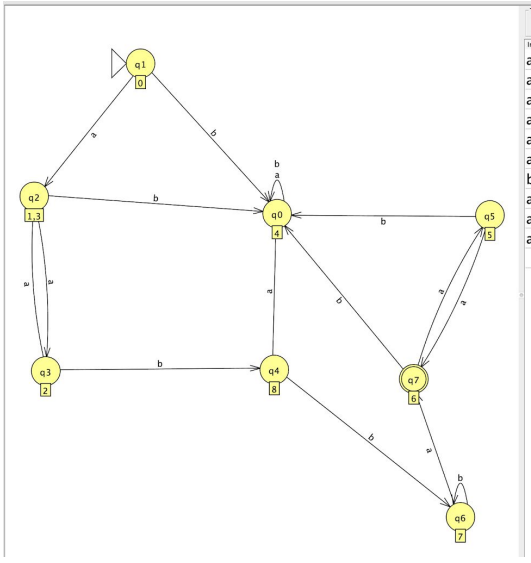



Table Text Size

| Input | Result |
|---|---|
| aabba | Accept |
| aaaabbba | Accept |
| aabbaaa | Accept |
| aaaaaabbaaaaa | Accept |
| aaaaaaaabba | Accept |
| a | Reject |
| bbb | Reject |
| abbaaa | Reject |
| aabbbaa | Reject |
| ab | Reject |