

## Le rapport de TP2

É : Étape

Éli : Éliminer

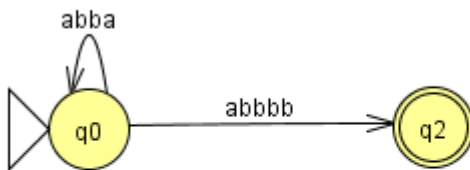
ER : Expression régulier

^ : mot-vide

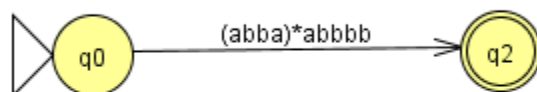
### Ex 1 :

1.

É 3b : Éli états q1



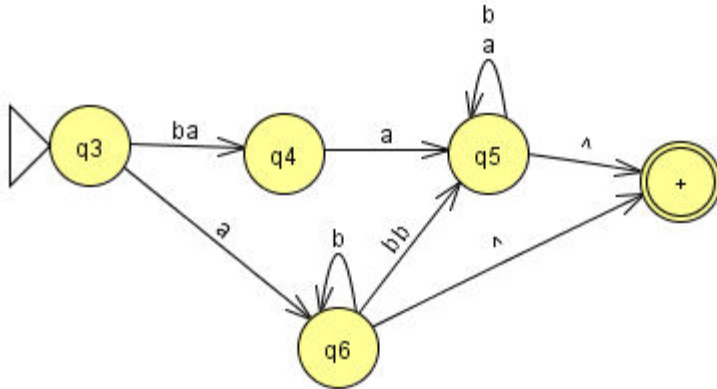
É 3a :



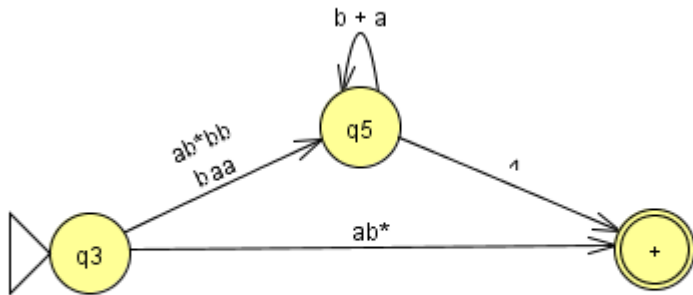
ER : (abba)\*abbbb

2.

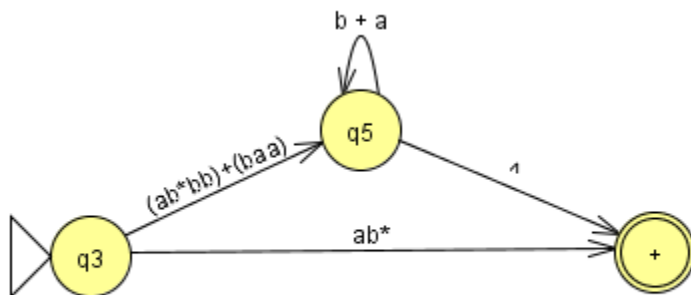
É 2 :



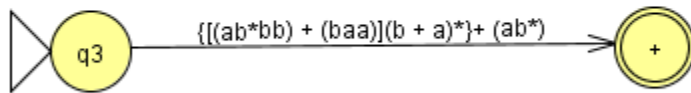
É 3a et 3b : Éli états q4 et q6



É 3a :



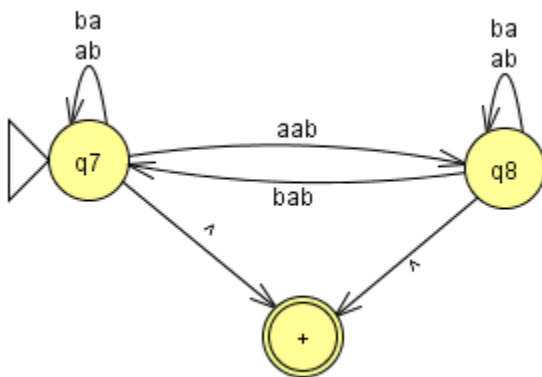
É 3a et 3b : Éli états q5



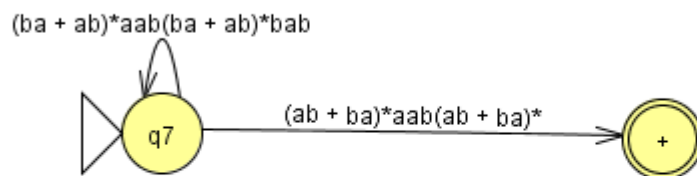
ER :  $\{[(ab^*bb) + (baa)](b + a)^* + (ab^*)$

3.

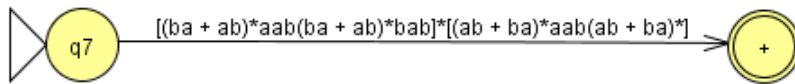
É 2 :



É 3a et 3b : Éli états q8



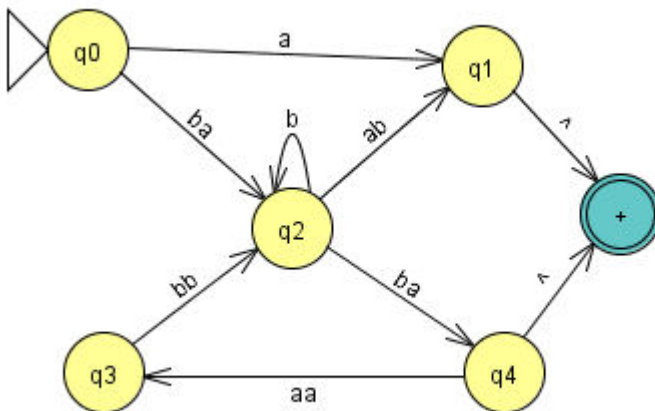
É 3a :



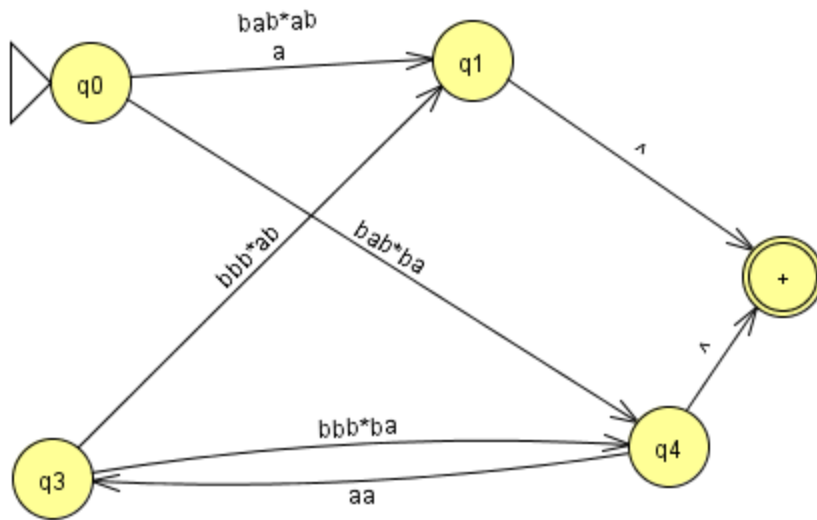
ER :  $[(ba + ab)^*aab(ba + ab)^*bab]^*[(ab + ba)^*aab(ab + ba)^*]$

4.

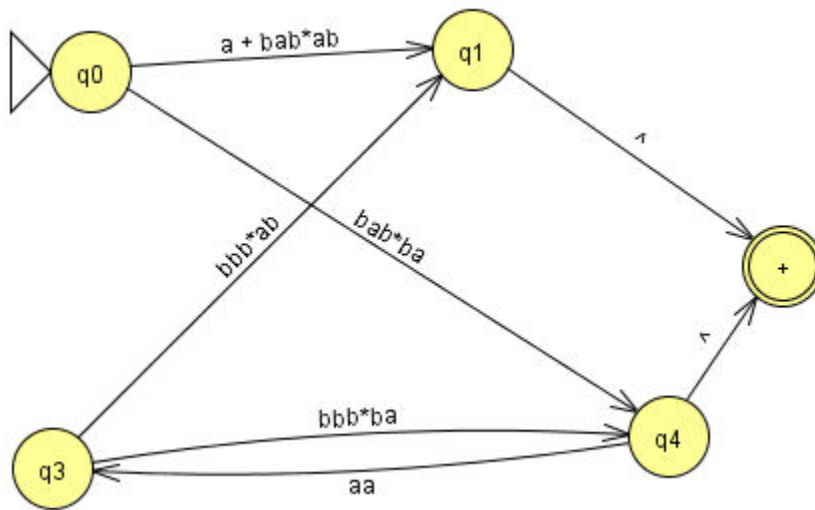
É 2 :



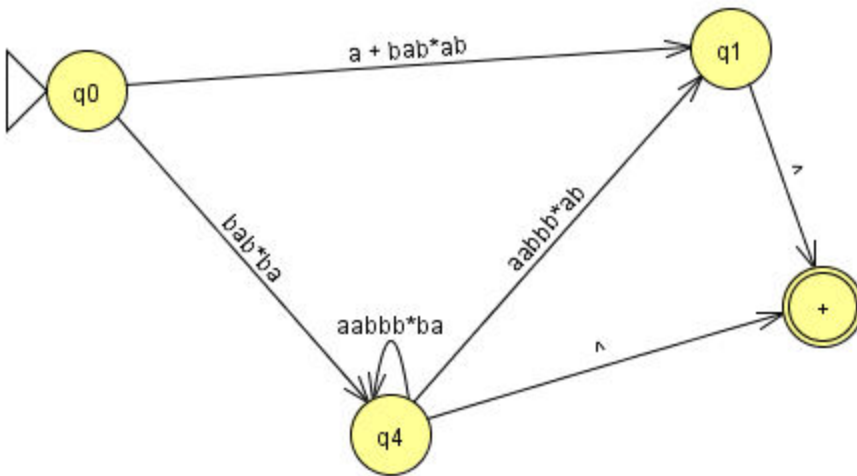
É 3b : Éli états q2



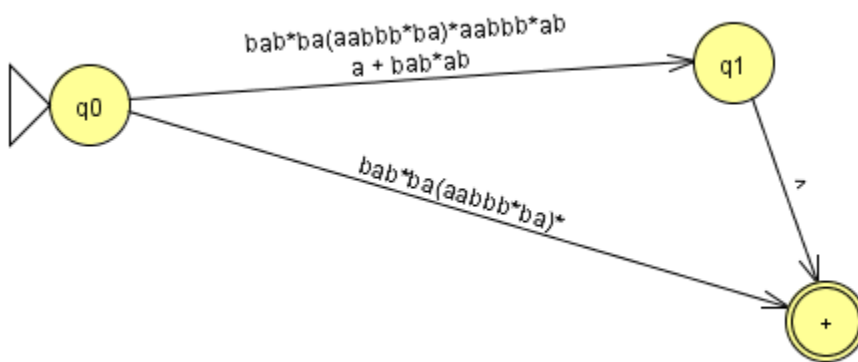
É 3a :



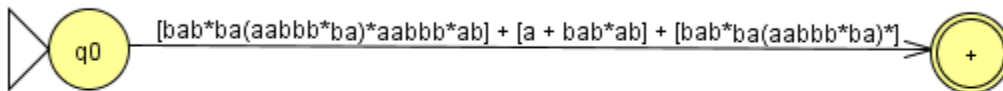
É 3b : Éli états  $q_3$



É 3b : Éli états q4



É 3a et 3b : Éli états q1



ER :  $[bab*ba(aabbb*ba)^*aabbb*ab] + [a + bab*ab] + [bab*ba(aabbb*ba)^*]$

## Ex 2 :

1. AF1 + AF2

$Z0 = x1 \text{ ou } y1$

$(Z0, a) = x2 \text{ ou } y2 = Z1$

$(Z0, b) = x3 \text{ ou } y1 = Z2$

$(Z1, a) = x4 \text{ ou } y2 = Z3$

$(Z1, b) = x3 \text{ ou } y1 = Z2$

$(Z2, a) = x2 \text{ ou } y2 = Z1$

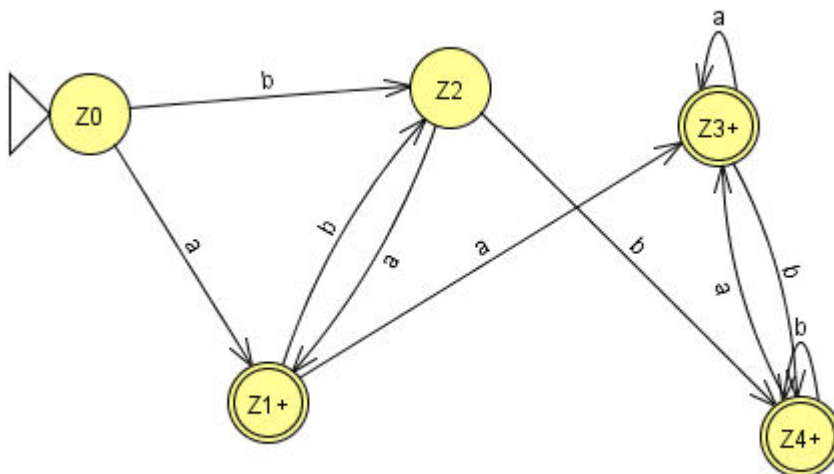
$(Z2, b) = x4 \text{ ou } y1 = Z4$

$(Z3, a) = x4 \text{ ou } y2 = Z3$

$(Z3, b) = x4 \text{ ou } y1 = Z4$

$(Z4, a) = x4 \text{ ou } y2 = Z3$

$(Z4, b) = x4 \text{ ou } y1 = Z4$



## 2. AF1AF2

$Z0 = x1$

$(Z0, a) = x2 = Z1$

$(Z0, b) = x3 = Z2$

$(Z1, a) = x4 \text{ ou } y1 = Z3$

$(Z1, b) = x3 = Z2$

$(Z2, a) = x2 = Z1$

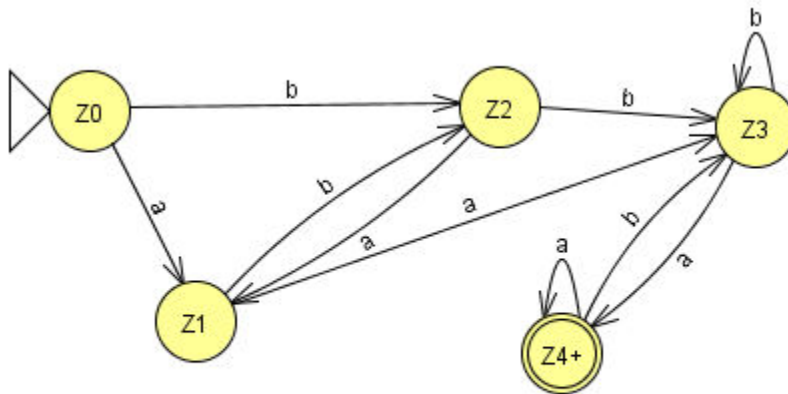
$(Z2, b) = x4 \text{ ou } y1 = Z3$

$(Z3, a) = x4 \text{ ou } y1 \text{ ou } y2 = Z4$

$(Z3, b) = x4 \text{ ou } y1 = Z3$

$(Z4, a) = x4 \text{ ou } y1 \text{ ou } y2 = Z4$

$(Z4, b) = x4 \text{ ou } y1 = Z3$



## 3. AF2AF1

$Z0 = y1$

$(Z0, a) = y2 \text{ ou } x1 = Z1$

$(Z0, b) = y1 = Z0$

$(Z1, a) = y2 \text{ ou } x1 \text{ ou } x2 = Z2$

$(Z1, b) = y1 \text{ ou } x3 = Z3$

$(Z2, a) = y2 \text{ ou } x1 \text{ ou } x2 \text{ ou } x4 = Z4$



$(Z2, b) = y1 \text{ ou } x3 = Z3$

$(Z3, a) = y2 \text{ ou } x1 \text{ ou } x2 = Z2$

$(Z3, b) = y1 \text{ ou } x4 = Z5$

$(Z4, a) = y2 \text{ ou } x1 \text{ ou } x2 \text{ ou } x4 = Z4$

$(Z4, b) = y1 \text{ ou } x3 \text{ ou } x4 = Z6$

$(Z5, a) = y2 \text{ ou } x1 \text{ ou } x4 = Z7$

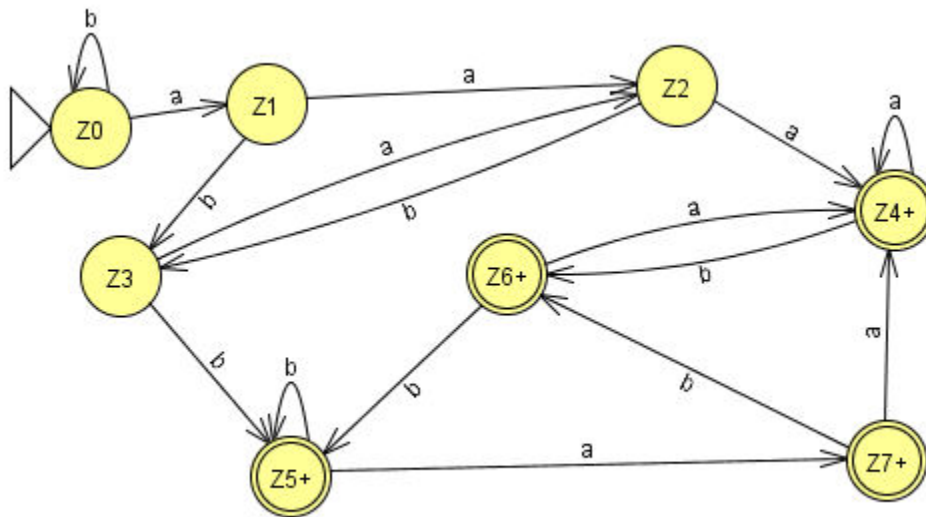
$(Z5, b) = y1 \text{ ou } x4 = Z5$

$(Z6, a) = y2 \text{ ou } x1 \text{ ou } x2 \text{ ou } x4 = Z4$

$(Z6, b) = y1 \text{ ou } x4 = Z5$

$(Z7, a) = y2 \text{ ou } x1 \text{ ou } x2 \text{ ou } x4 = Z4$

$(Z7, b) = y1 \text{ ou } x3 \text{ ou } x4 = Z6$



4.  $(AF1)^*$

$Z0 = x1$

$(Z0, a) = x2 = Z1$

$(Z0, b) = x3 = Z2$

$(Z1, a) = x4 \text{ ou } x1 = Z3$

$(Z1, b) = x3 = Z2$

$(Z2, a) = x2 = Z1$

$(Z2, b) = x4 \text{ ou } x1 = Z3$

$(Z3, a) = x4 \text{ ou } x1 \text{ ou } x2 = Z4$

$(Z3, b) = x4 \text{ ou } x1 \text{ ou } x3 = Z5$

$(Z4, a) = x4 \text{ ou } x1 \text{ ou } x2 = Z4$

$(Z4, b) = x4 \text{ ou } x1 \text{ ou } x3 = Z5$

$(Z5, a) = x4 \text{ ou } x1 \text{ ou } x2 = Z4$

$(Z5, b) = x4 \text{ ou } x1 \text{ ou } x3 = Z5$

