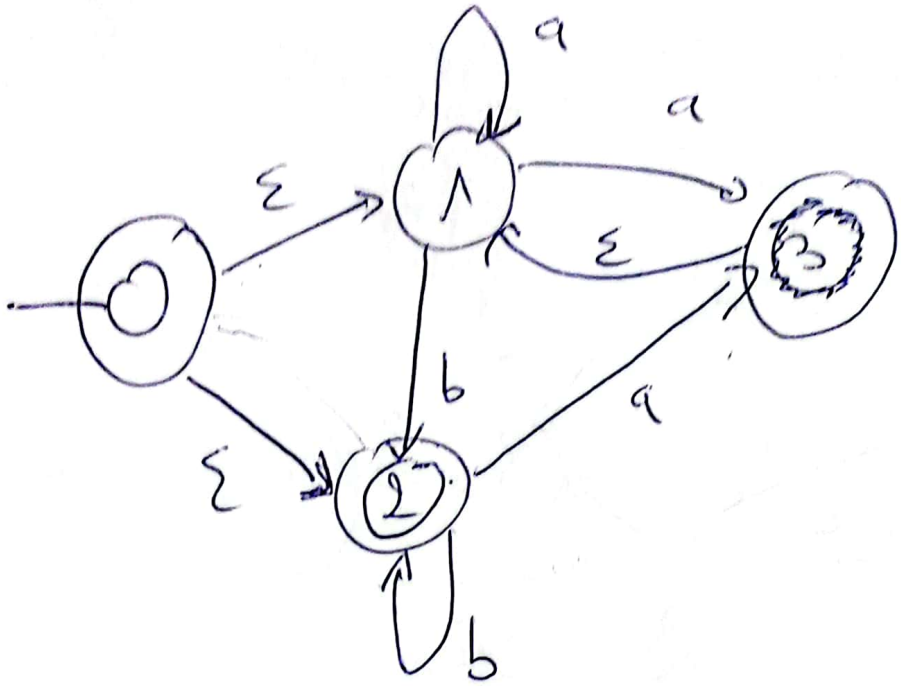


① RAFND ⇒ AFD

② est il minimal ? Justifier.

A = {0} ε fermeture {0} = {0, 1, 2}

Transition {{0,1,2}, a} = {1, 3} = B

Transition ({0,1,2}, b} = {2} = C

B = {1, 3} ε fermeture {1, 3} = {1}

Transition ({1}, a) = {1, 3} = B

Transition ({1}, b) = {2} = C

C = {2} ε fermeture {2} = {2}

Transition ({2}, a) = {3} = D

Transition ({2}, b) = {2} = C

D = {3} Σ fermeture {3} = {1}

Transition ({1}, a) = {1, 3} B

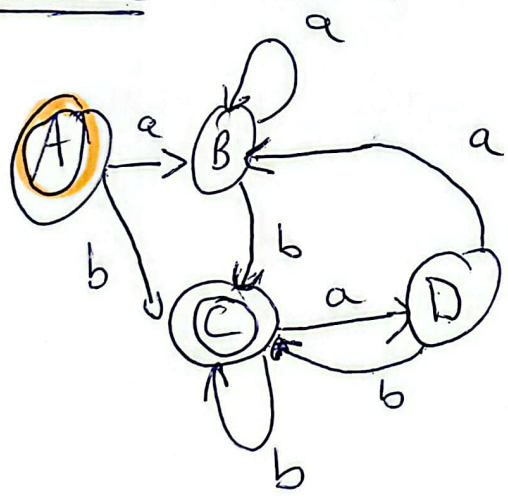
Transition ({1}, b) = {2} C

~~R.T.T~~ (Représentation avec table Transition)

	a	b
A	B	C
B	B	C
C	D	C
D	B	C

	a	b
0	A	—
1	B	C
2	—	D
3	B	C

~~R.G~~ R.T.T (Représentation de table de Transition)

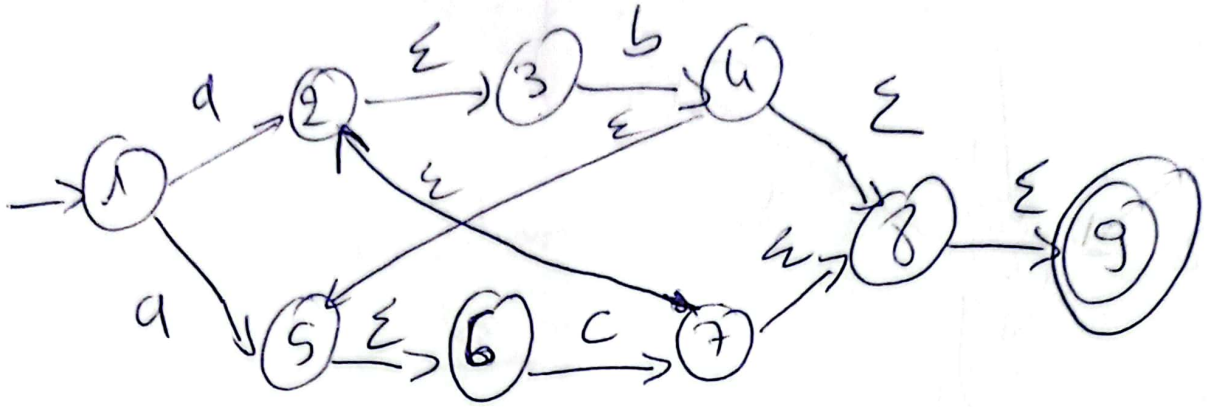


(A, B, C) (D)
(A, B) (C) (D)
(A) (B, C) (D)

- eq_0 {B, D} {A, C}
- eq_1 {BD} {A, C}

	a	b
A.C	B, D	A, C
BD	B, D	A, C

① Rendre cette Automate déterministe



$A = \{1\}$ ε fermiture $\{1\} = \{1\}$

Transition $(\{1\}, a) = \{2, 5\} = B$

Transition $(\{1\}, b) = \{\phi\}$

$B = \{2, 5\}$ ε fermiture $\{2, 5\} = \{2, 5, 3, 6\}$

Transition $(\{3, 5, 3, 6\}, a) = \{\phi\}$

Transition $(\{3, 5, 3, 6\}, b) = \{4\} = C$

Transition $(\{3, 5, 3, 6\}, c) = \{7\} = D$

$C = \{4\}$ ε fermiture $\{4\} = \{4, 8, 9, 5, 6\}$

Transition $(\{4, 8, 9, 5, 6\}, a) = \phi$

Transition $(\{4, 8, 9, 5, 6\}, b) = \{\phi\}$

Transition $(\{4, 8, 9, 5, 6\}, c) = \{7\} = D$

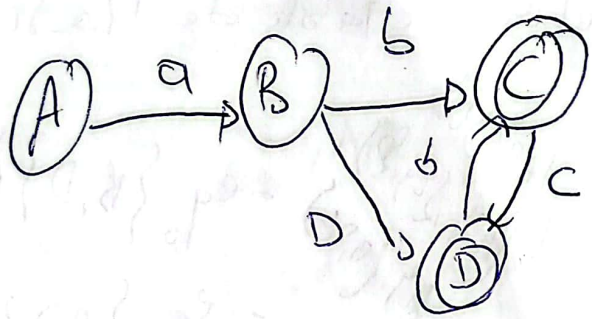
D (4) . ε fermeture(4) = {7, 8, 9, 2, 3.}, a) = $\emptyset$

Transition ↳ ↳ , b) = 4

↳ , c) = $\emptyset$

↳

	a	b	c
A	B	—	—
B	—	C	D
C	—	—	D
D	—	C	—



e_{q_0} {A, B} {C, D}

e_{q_1} {A}, {B} . {C} {D}

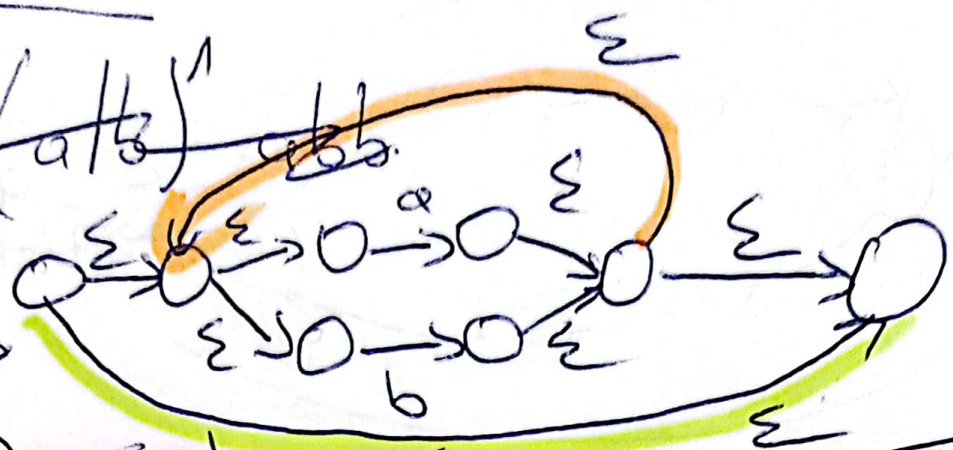
e_{q_2} {A}, {B} {C} {D} = q_1

est minimal

Le 20/04/2024

~~ER : (a|b)* abb~~

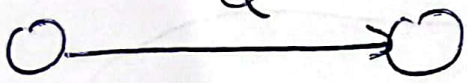
a|b*



I AFND ε transitions :

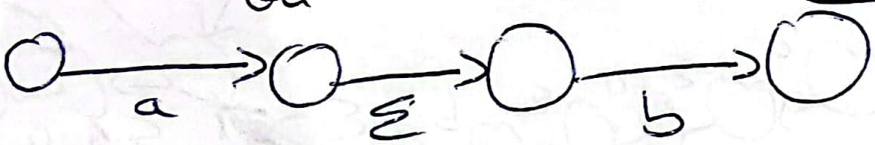
1) Algorithme de Thompson

a

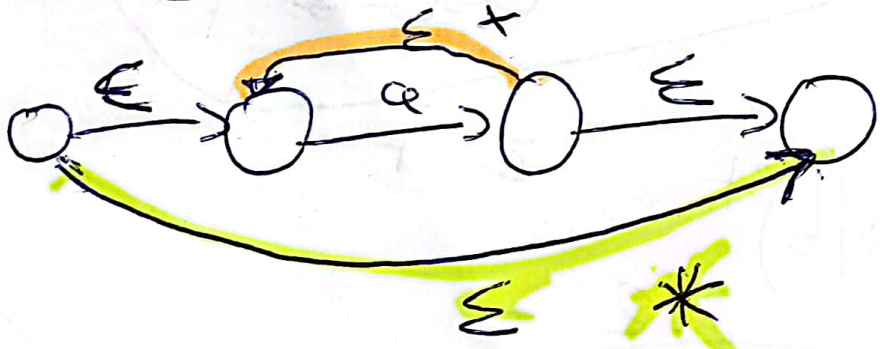


ab

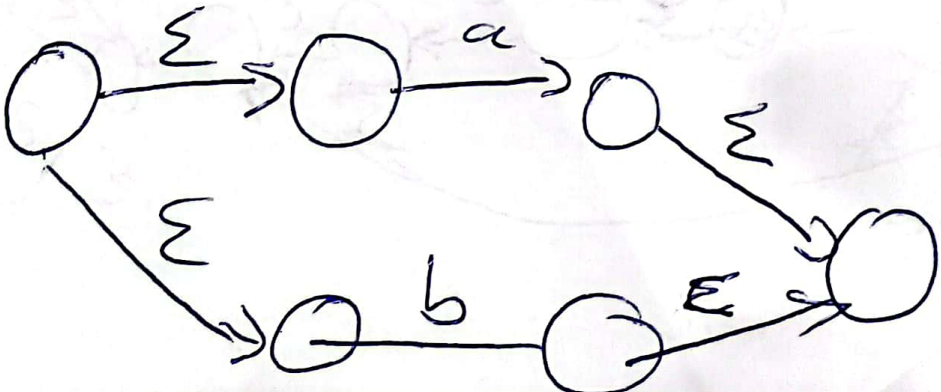
ou



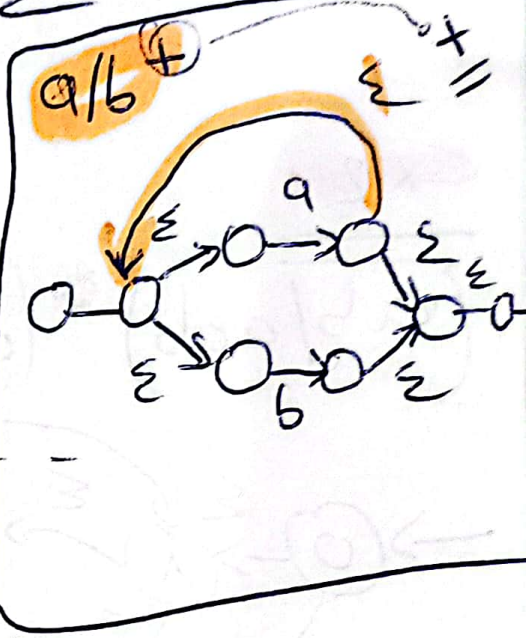
a*



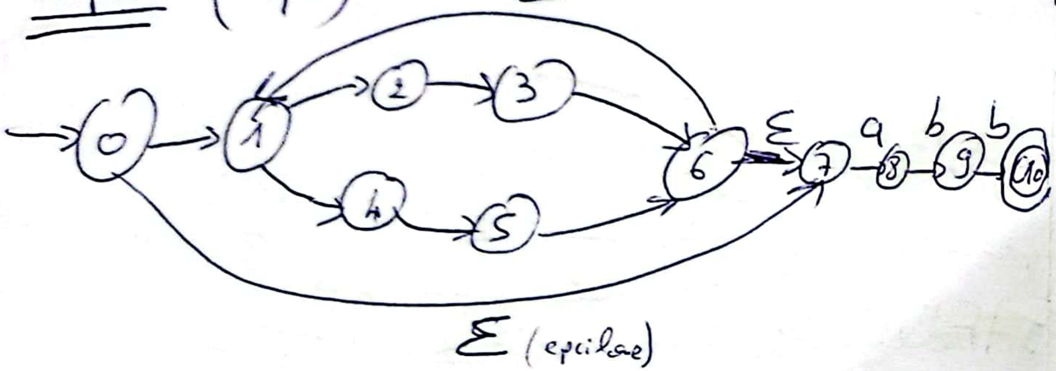
a|b



a|b+



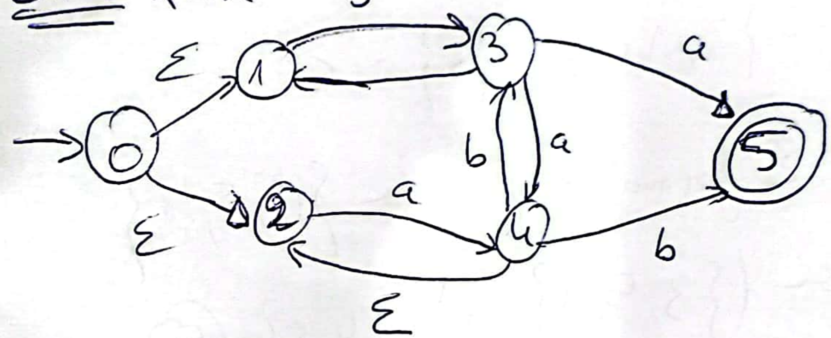
Ex 1 $(a|b)^* abb \varepsilon$



si + il faut au moins 3andek a ou b

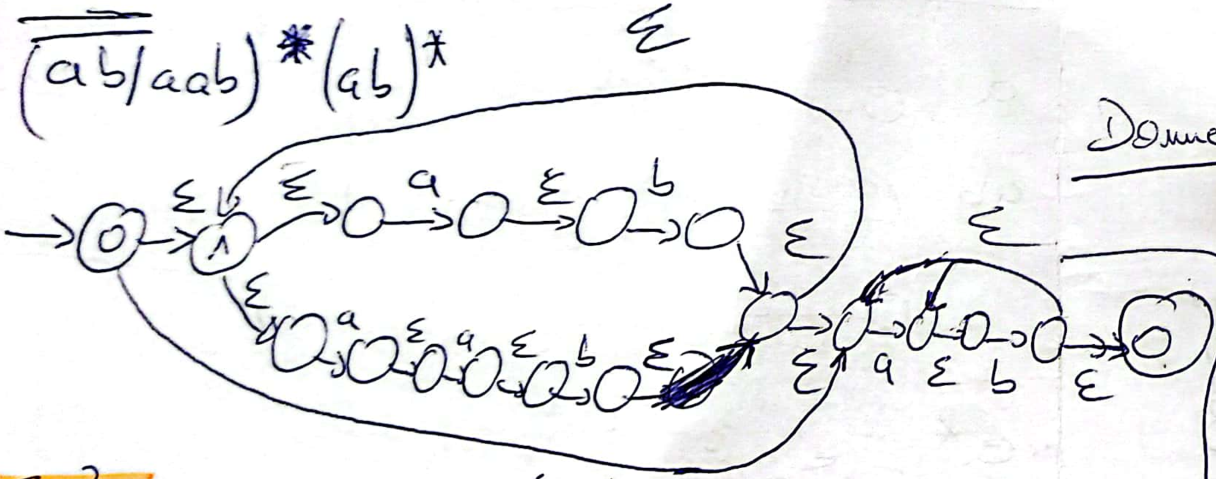
si * tnajem ma3andekch 7ata wa7da fihom

Ex 4 $\alpha\alpha\alpha$



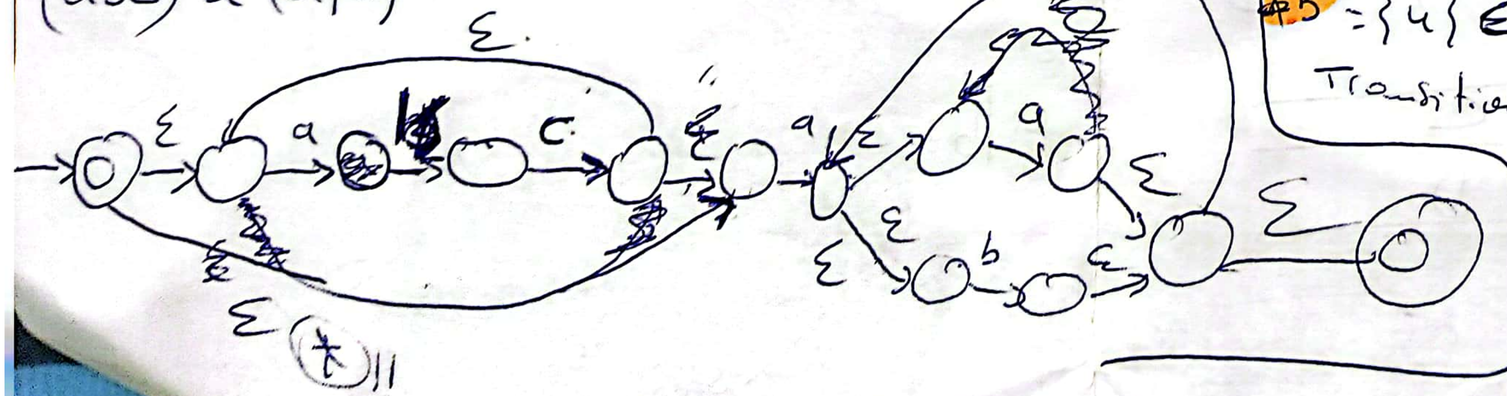
Ex 2

$(ab/aab)^*(ab)^*$



Ex 3

$(abc)^* a (a/b)^+$



Donner l'AFD

A = {0} ε fermiture {0} = {0,1,2}

Transition = ({0,1,2}, a) = {4} = B

Transition = ({0,1,2}, b) = {3} = C

B = {4} ε fermuture {4} = {4,2}

Transition {4,2} = {4} = B

Transition {4,2}, b} = 3,5} = D

C = {3} Σ fermeture {3} = {3,1}

Transition ({3,1}, a) = {4,5} = (E)

Transition {3,1}, b) = {3} = C

D = {3,5} Σ fermeture {3,5} = {3,5,1}

Transition ({3,5,1}, a) = {4,5} (E)

Transition ({3,5,1}, b) = {3} . C

E = {4,5} Σ fermeture {4,5} = {4,5,2}

Transition = ({4,5,2,3}, a) = {4} = B

↑ = ({a → b = {3,5} = (D)

	a	b
A	B	C
B	B	D
C	E	C
(D)	E	C
(E)	B	D