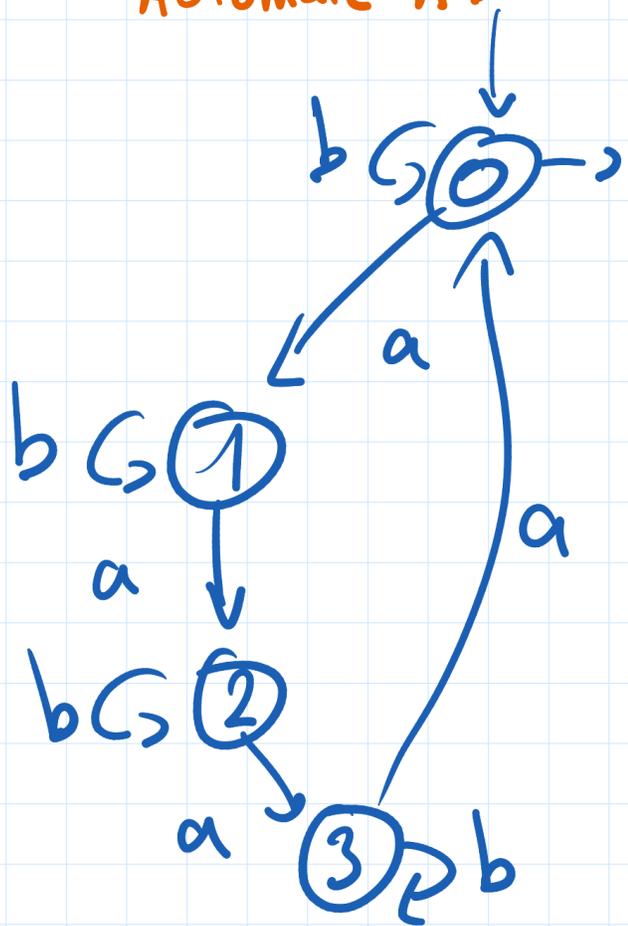
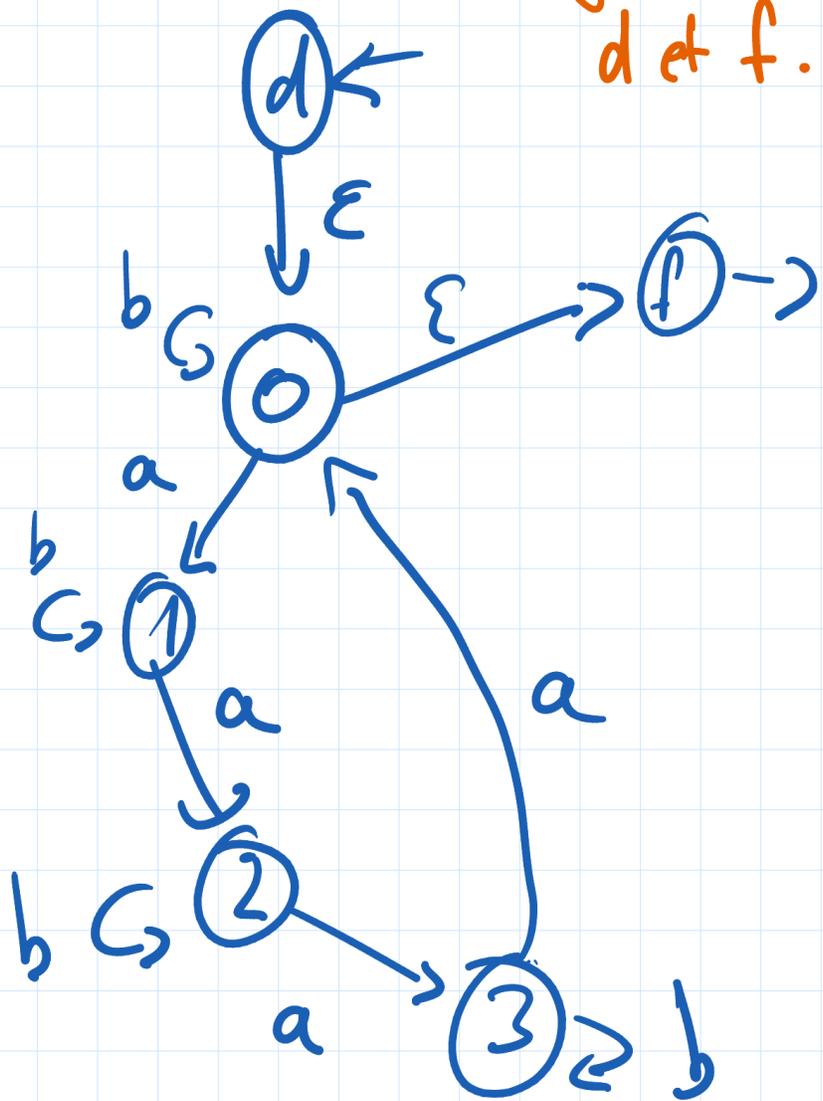


Exercice 2.

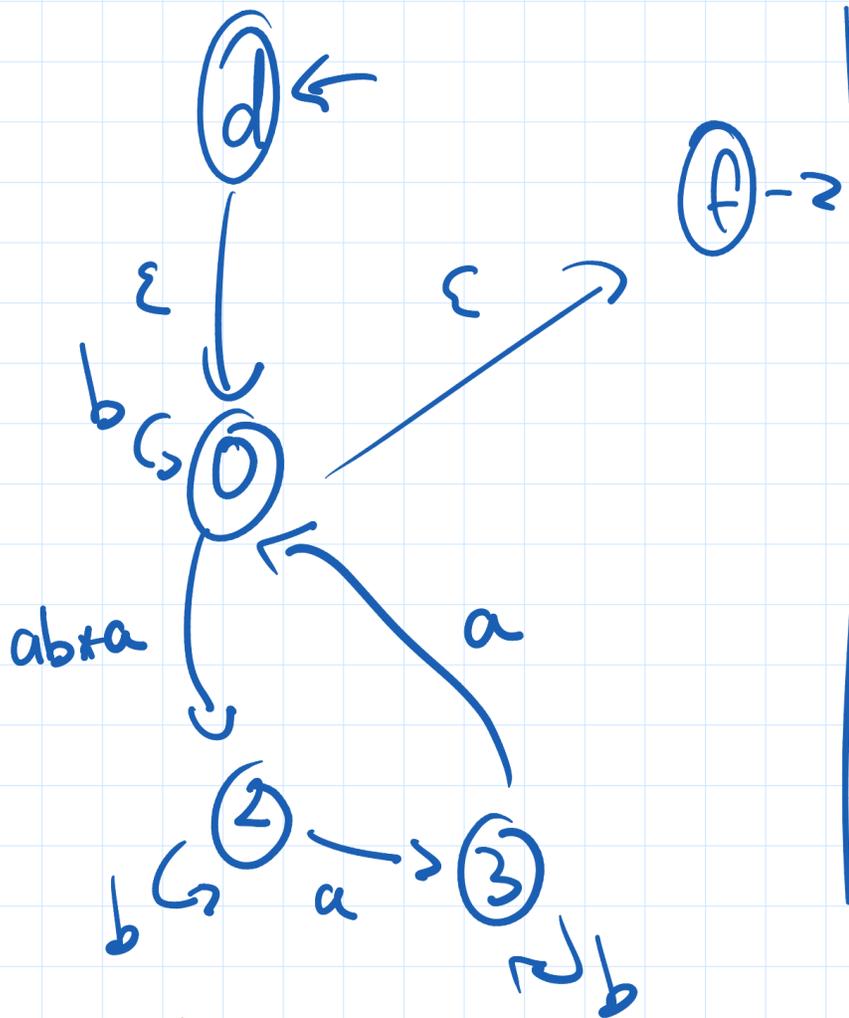
Automate A.



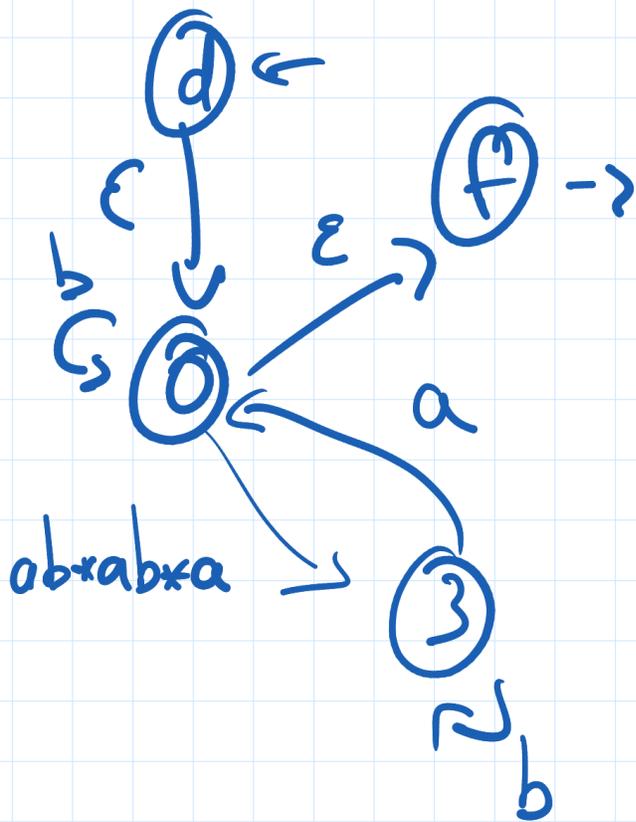
1. ajout des états d et f.



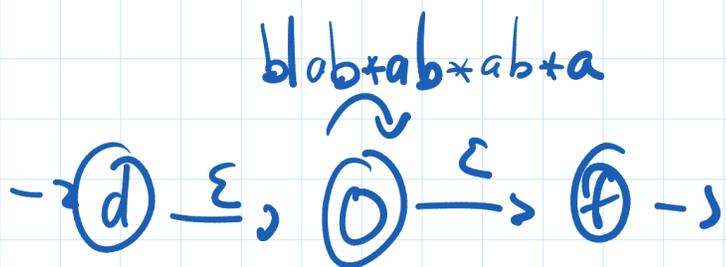
2. élimination de 1



3. élimination de 2

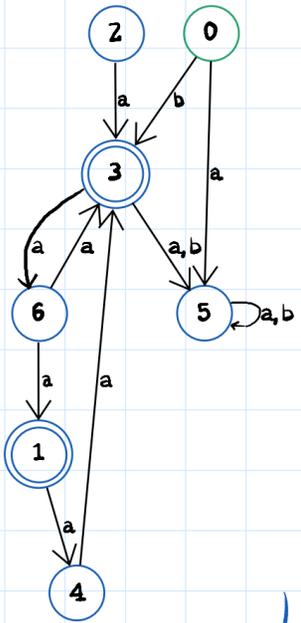


4. élimination de 3.

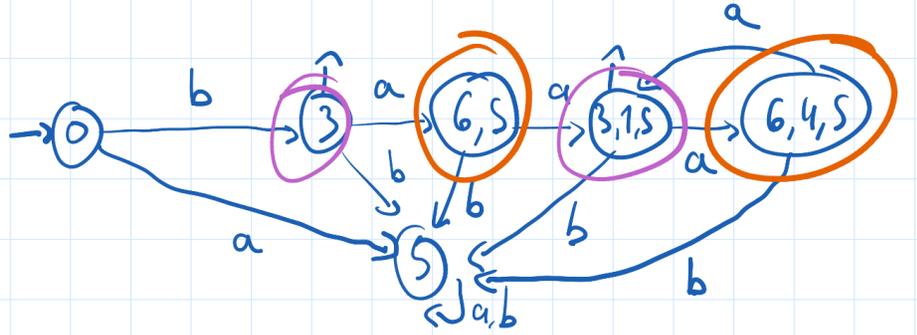


Avec l'automate 4., il vient que A calcule $(b)ab^*ab^*ab^*a)^*$

Exercice 3



états	a	b
0	5	3
5	5	5
3	6,5	5
6,5	3,1,5	5
3,1,5	6,4,5	5
6,4,5	3,1,5	5



Le langage associé est $b(aa)^*$

- 0. $\{v \in \Sigma^* \mid uv \in L \text{ avec } u \text{ les mots acceptés par } 0\}$

$\rightarrow \varepsilon^{-1}L = L$

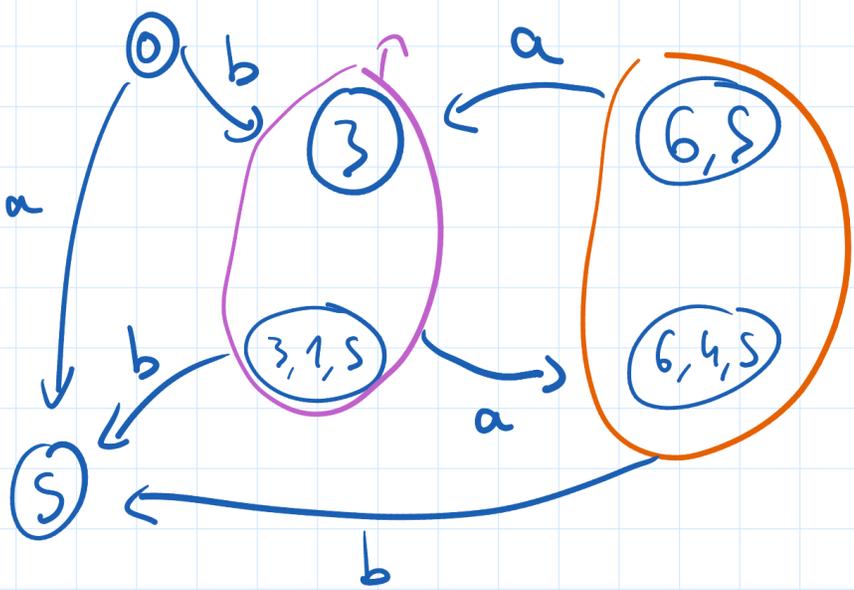
$\rightarrow 6,5. (ba)^{-1}L = a(aa)^*$

- 3. $b^{-1}L = (aa)^*$

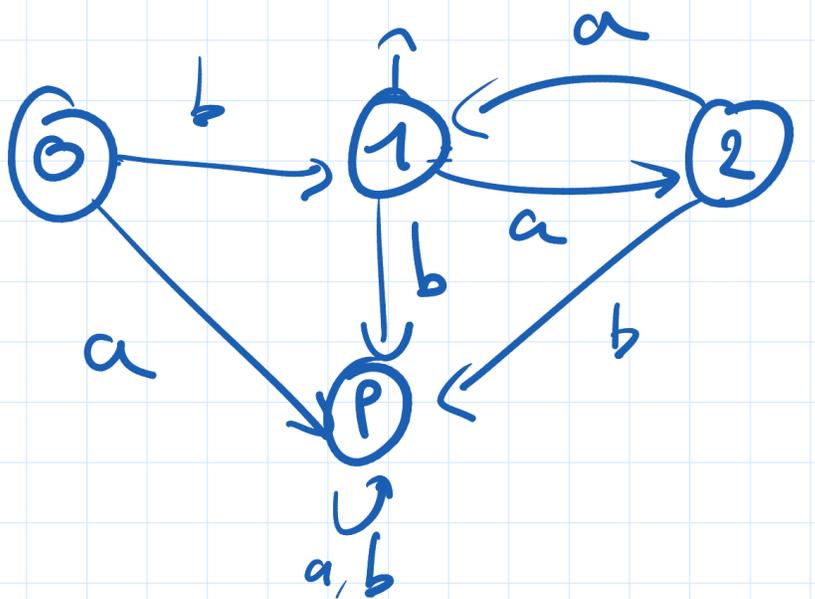
$\rightarrow 3,1,5. (baa)^{-1}L = (aa)^*$

$\rightarrow 6,4,5. (baaa)^{-1}L = a(aa)^*$

$\rightarrow 5. (ab)^{-1}L = \emptyset$



\equiv



Les 4 résiduels du langage calculé par A sont:

• 0 $\rightarrow \varepsilon^{-1}L = L$

• P $\rightarrow (ab)^{-1}L = \emptyset$

• 1 $\rightarrow b^{-1}L = (aa)^*$

• 2 $\rightarrow (ba)^{-1}L = a(aa)^*$