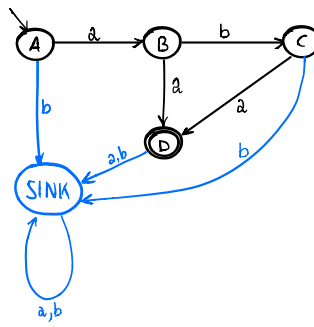
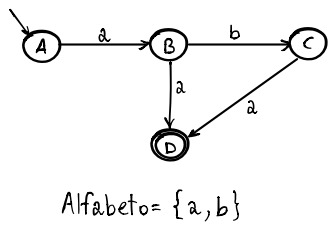
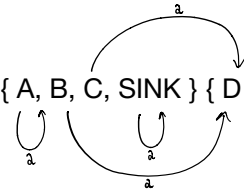


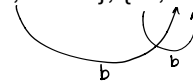
### Esercizio 1 - Minimizzare il seguente DFA:



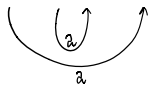
Non finali =  $\{A, B, C, \text{SINK}\}$ , finali =  $\{D\}$ . Riusciamo a splittare il primo blocco? Sì:  $\{A, B, C, \text{SINK}\} \{D\}$



Otteniamo  $\{A, \text{SINK}\}, \{B, C\}, \{D\}$ . Riusciamo a splittare qualcosa? Sì:  $\{A, \text{SINK}\}, \{B, C\}, \{D\}$

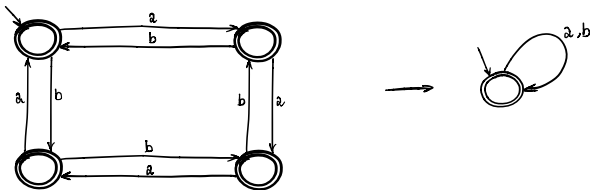


Otteniamo  $\{A, \text{SINK}\} \{B\} \{C\} \{D\}$ . Non servirebbe andare oltre, in quanto SINK sarebbe "bruciato". In ogni caso, se si procedesse, ci si accorgerebbe che:  $\{A, \text{SINK}\} \{B\} \{C\} \{D\}$  e pertanto il primo blocco verrebbe spezzato.



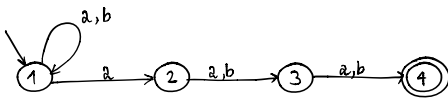
Concludiamo pertanto che il DFA era già minimo.

### Esercizio 2 - Minimizzare il seguente DFA:



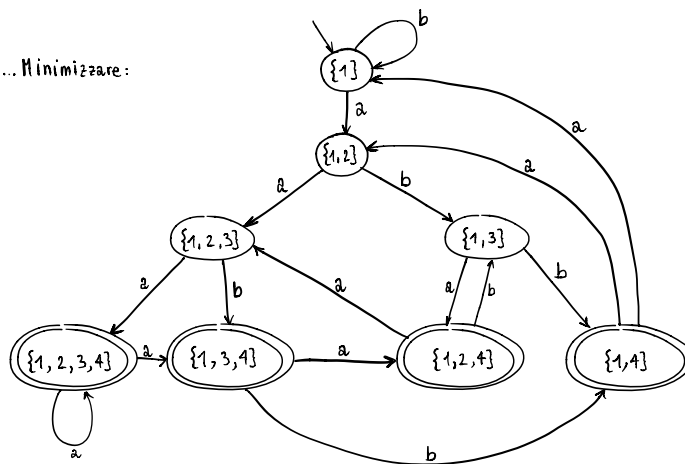
### Esercizio 3

Regexp  $r = (a \mid b)^* a (a \mid b) (a \mid b)$



... Minimizzare:

	a	b
$\{1\}$		
$\{1, 2\}$		
$\{1, 2, 3\}$		
$\{1, 3\}$		
$\{1, 2, 3, 4\}$		
$\{1, 3, 4\}$		



STATI FINALI RAPPRESENTANO:  $(w) aab$   
 $(w) aab$   
 $(w) aba$   
 $(w) abb$