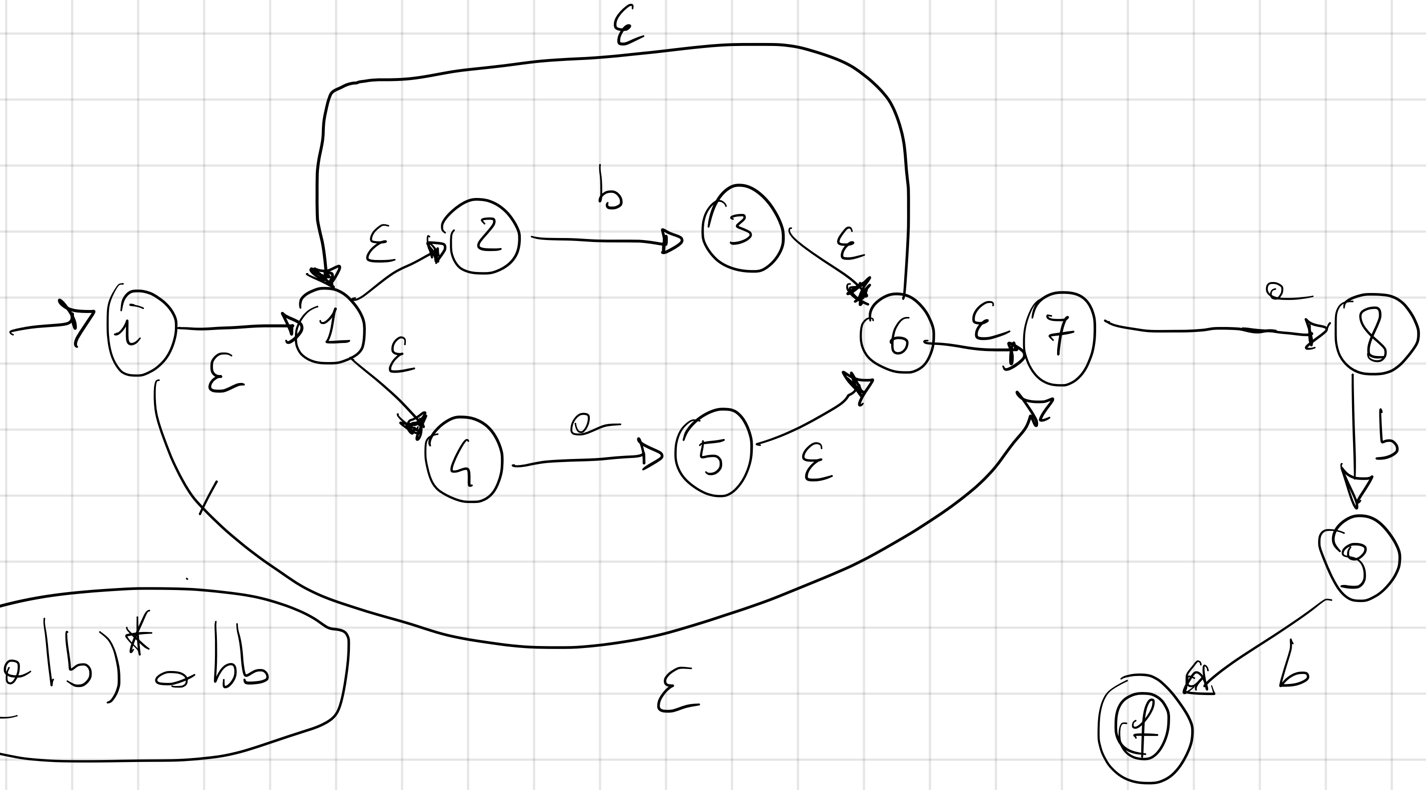
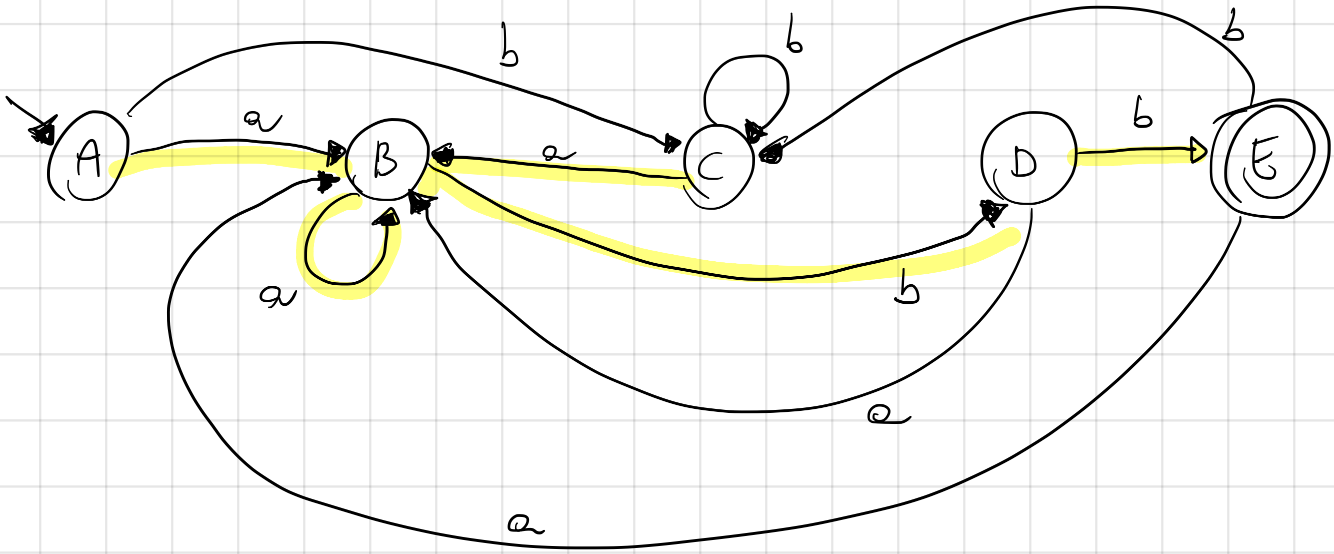


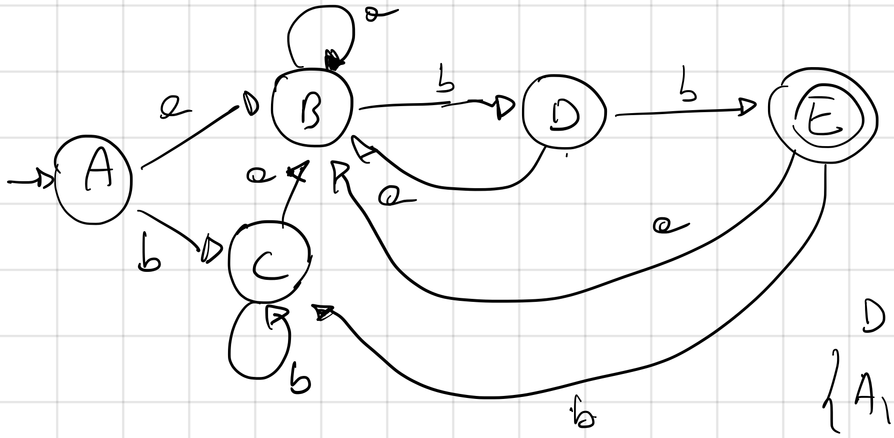
$(a|b)^*abb$

S \ ε	a	b
$\varepsilon\text{-Clos}(\{i\}) = \{i, 1, 2, 4, 7\} = A$	$\varepsilon\text{-closure}(move(\{i, 1, 2, 4, 7\}, a)) = \varepsilon\text{-Clos}(\{5, 8\}) = \{5, 6, 7, 1, 2, 4, 8\} = B$	$\dots, \varepsilon\text{-Clos}(\{3\}) = \{3, 6, 7, 1, 2, 4\} = C$
$B = \{5, 6, 7, 1, 2, 4, 8\}$	B	$\varepsilon\text{-cl}(\{3, 9\}) = \{3, 6, 7, 1, 2, 4, 9\} = D$
$C = \{3, 6, 7, 1, 2, 4\}$	B	C
$D = \{3, 6, 7, 1, 2, 4, 9\}$	B	$\varepsilon\text{-cl}(\{3, f\}) = \{3, 6, 7, 1, 2, 4, f\} = E$
$E = \{3, 6, 7, 1, 2, 4, f\} \in F_D$	B	C



$ababb$ $\qquad A \xrightarrow{a} B \xrightarrow{b} D \xrightarrow{a} B \xrightarrow{b} D \xrightarrow{b} E$

if $|N| = n$ then the powerset of N, denoted by 2^N or $Pow(N)$, has 2^n elements.



$\Pi^{(1)} = \{\{E\}, \{A,B,C,D\}\}$

Let's try to reduce $\{A,B,C,D\}$

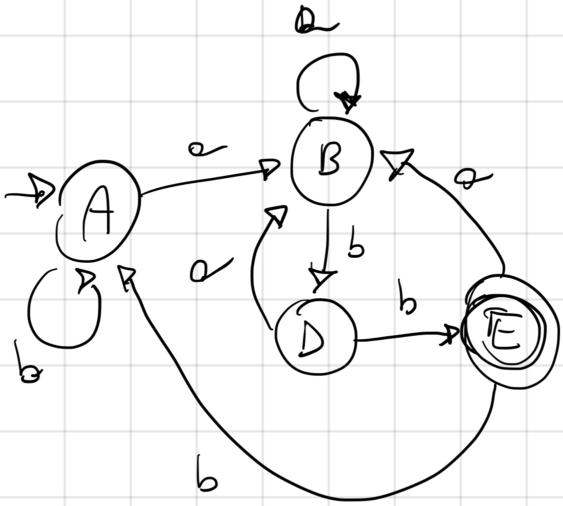
$D \xrightarrow{b} E$

$\{A,B,C\} \xrightarrow{b} \{A,B,C,D\}$

Thus, D should be distinguished from A, B, C.

Moreover, $B \xrightarrow{d} D$ and $\{A,C\} \xrightarrow{b} \{A,C\}$, so alse be should be distinguished. $\Pi^{(2)} = \{\{E\}, \{D\}, \{B\}, \{A,C\}\}$

$\Pi^{(3)} = \Pi^{(2)}$ = partition that can not be refined further.



Minimal DFA for $(a|b)^* abb$