

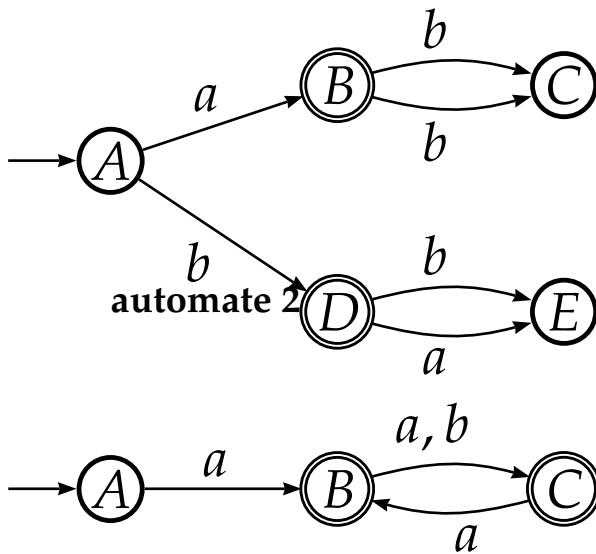
February 15, 2011

Question 1

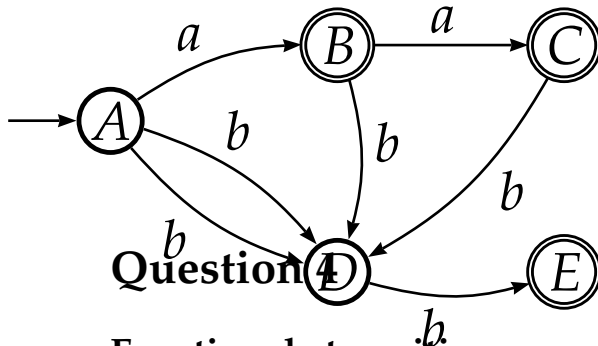
1.1.1

automate 1

Rponse:



automate 3



Fonction de transition

$$\begin{aligned}
 \delta(\emptyset, a) &= \emptyset \\
 \delta(\{1\}, a) &= \{1, 2\} \\
 \delta(\{2\}, a) &= \{3\} \\
 \delta(\{3\}, a) &= \{1\} \\
 \delta(\{4\}, a) &= \{2\} \\
 \delta(\{1, 2\}, a) &= \{1, 2, 3\} \\
 \delta(\{1, 3\}, a) &= \{1, 2\} \\
 \delta(\{1, 4\}, a) &= \{1, 2\} \\
 \delta(\{2, 3\}, a) &= \{1, 3\} \\
 \delta(\{2, 4\}, a) &= \{2, 3\} \\
 \delta(\{3, 4\}, a) &= \{1, 2\} \\
 \delta(\{1, 2, 3\}, a) &= \{1, 2, 3\} \\
 \delta(\{1, 2, 4\}, a) &= \{1, 2, 3\} \\
 \delta(\{2, 3, 4\}, a) &= \{1, 2, 3\} \\
 \delta(\{3, 4, 1\}, a) &= \{1, 2\} \\
 \delta(\{1, 2, 3, 4\}, a) &= \{1, 2, 3\}
 \end{aligned}$$

$$\begin{aligned}
 \delta(\emptyset, b) &= \emptyset \\
 \delta(\{1\}, b) &= \{3\} \\
 \delta(\{2\}, b) &= \{1, 2\} \\
 \delta(\{3\}, b) &= \{4\} \\
 \delta(\{4\}, b) &= \emptyset \\
 \delta(\{1, 2\}, b) &= \{1, 2, 3\} \\
 \delta(\{1, 3\}, b) &= \{3, 4\} \\
 \delta(\{1, 4\}, b) &= \{3\} \\
 \delta(\{2, 3\}, b) &= \{1, 2, 4\} \\
 \delta(\{2, 4\}, b) &= \{1, 2\} \\
 \delta(\{3, 4\}, b) &= \{4\} \\
 \delta(\{1, 2, 3\}, b) &= \{1, 2, 3, 4\} \\
 \delta(\{1, 2, 4\}, b) &= \{1, 2, 3\} \\
 \delta(\{2, 3, 4\}, b) &= \{1, 2, 4\} \\
 \delta(\{3, 4, 1\}, b) &= \{3, 4\} \\
 \delta(\{1, 2, 3, 4\}, b) &= \{1, 2, 3, 4\}
 \end{aligned}$$

Diagramme de transition

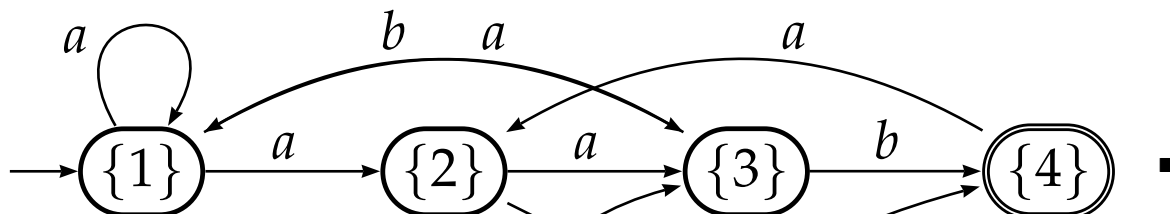
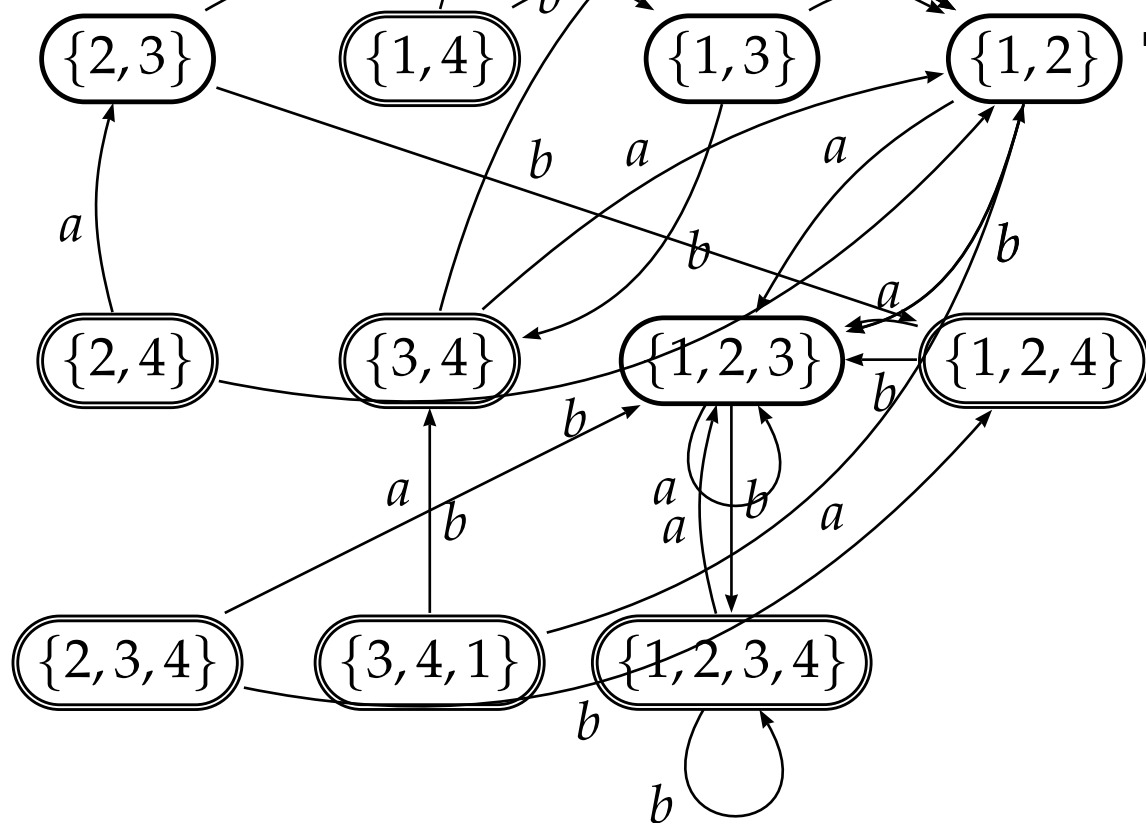


Diagramme de transition simplifié



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