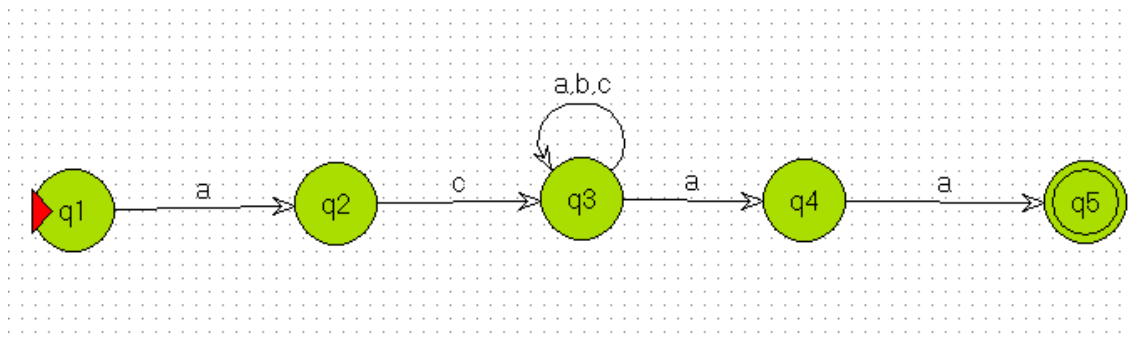


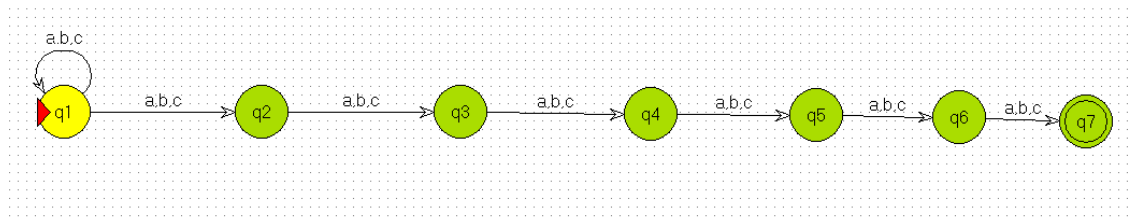
Exercício 09

- 1) Considere as seguintes linguagens:
 - $L1 = \{w \in \{a, b, c\}^* \mid w \text{ começa com } ac \text{ e termina com } aa\}$.
 - $L2 = \{w \in \{a, b, c\}^* \mid |w| > 5\}$.
- 2) Escreva as linguagens abaixo:
 - a. $L5 = L1 \cup L2 \{w \in \{a,b,c\}^* \mid w \text{ começa com } ac \text{ e termina com } aa \text{ ou } |w| > 5 \}$;
 - b. $L6 = L1 \circ L2 \{w.v \in \{a,b,c\}^* \mid |w| > 5 \text{ e } v \text{ começa com } ac \text{ e termina com } aa\}$;
 - c. $L7 = L1^* \{w1.w2.w3...wn \in \{a,b,c\}^* \mid \text{cada } w \text{ começa com } ac \text{ e termina com } aa, n > 0\}$;
 - d. $L8 = L2' = \{w \in \{a,b,c\}^* \mid |w| \leq 5 \}$;
 - e. $L9 = L1 \cap L2 = \{w \in \{a,b,c\}^* \mid |w| > 5 \text{ e começa com } ac \text{ e termina com } aa \}$;
 - f. $L10 = L1 - L2 = \{w \in \{a,b,c\}^* \mid w \text{ começa com } ac \text{ e termina com } aa \text{ e } |w| \leq 5\}$.
- 3) Desenhe o autômato NFA para: L1, L2, L5, L6 e L7;

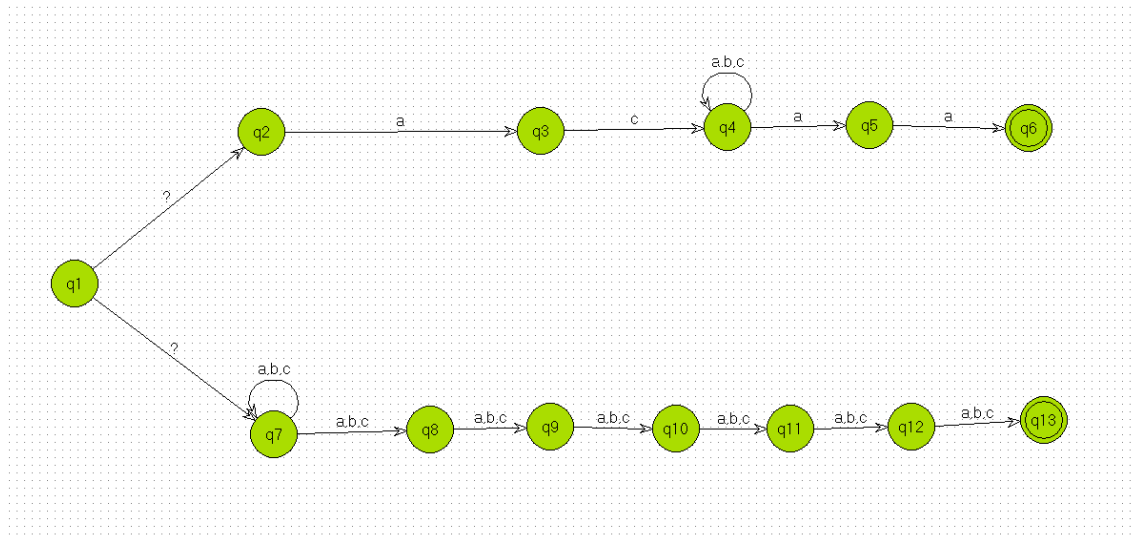
L1:



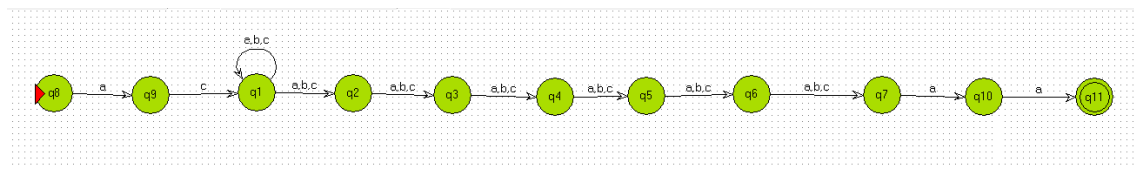
L2:



L5:



L6:



L7:

