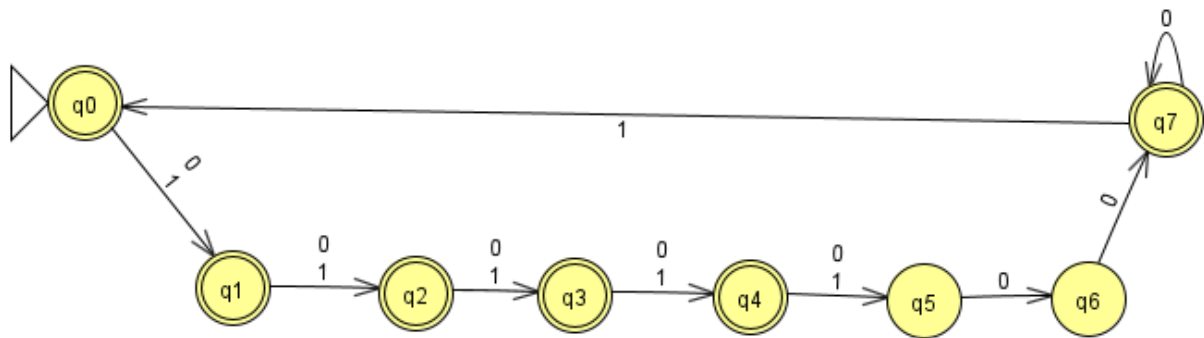


Projeto 5
Pedro Vinícius Dousseau dos Santos - 135540
Vitor Galioti Martini - 135543

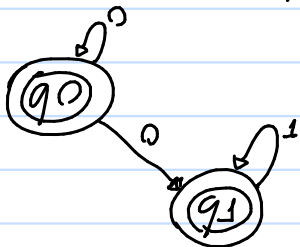
∴ Prove que a Linguagem L_1 é regular (considere $\Sigma = \{0,1\}$):

$L_1 = \{w \mid w \text{ contém a cada bloco de cinco símbolos consecutivos pelo ao menos dois } 0\text{'s}\}$



2.

	0	1
q0	{q0, q1}	\emptyset
q1	\emptyset	{q1}

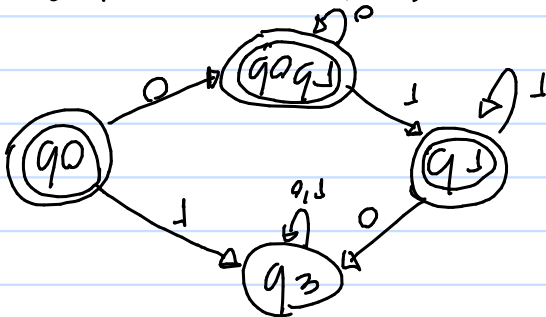


a)

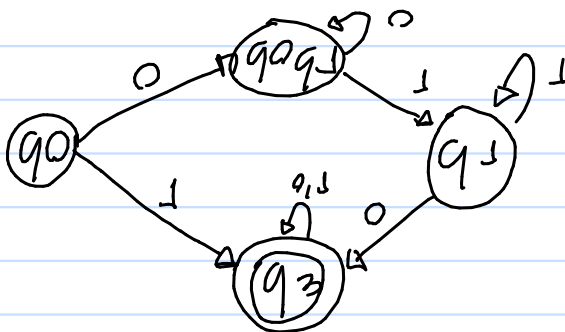
	0	1
q0	{q0, q1}	\emptyset
q0q1	{q0, q1}	q1
q1	\emptyset	q1
\emptyset	\emptyset	\emptyset

$0^* 01^*$

$$L = \{w \mid w = \epsilon + 0^* 01^*\}$$

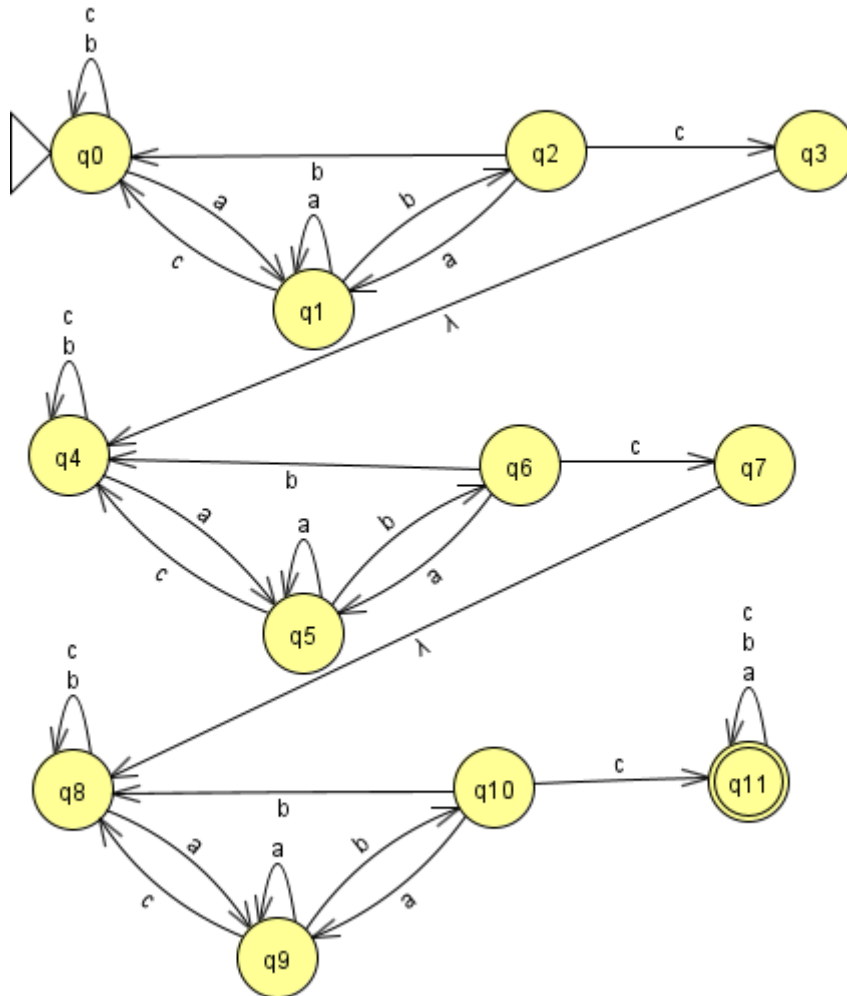


b)

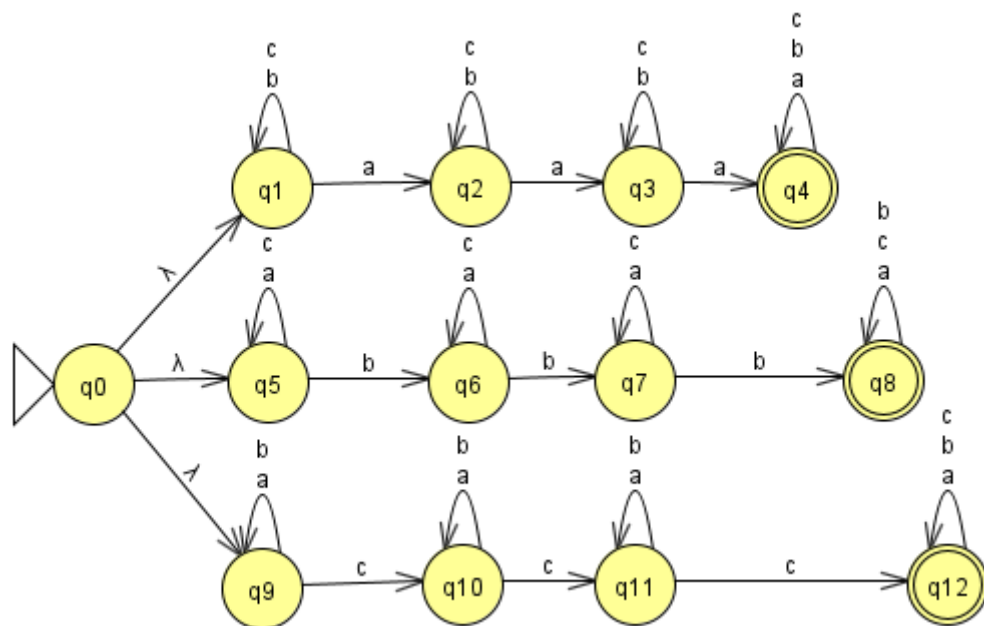


∴ Projetar um ε -NFA para as seguintes linguagens (considere $\Sigma = \{a, b, c\}$):

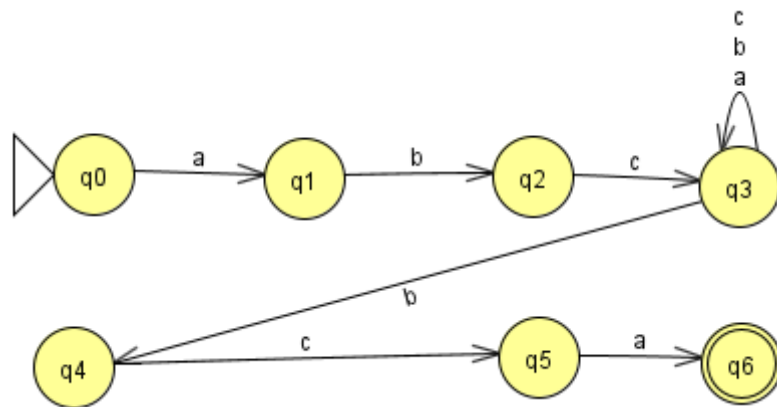
A. $L_2 = \{w \mid w \text{ contém no mínimo três ocorrências de } abc\}$



B. $L_3 = \{w \mid w \text{ contém no mínimo três ocorrências de } a \text{ ou no mínimo três ocorrências de } b \text{ ou no mínimo três ocorrências de } c\}$



C. $L_4 = \{w \mid w \text{ começa com } abc \text{ e termina com } bca\}$



D. $L_5 = \{w \mid |w| > 1 \text{ e os } a\text{'s (se houver) precedem os } b\text{'s e } b\text{'s (se houver) precedem os } c\text{'s}\}$

