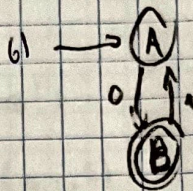
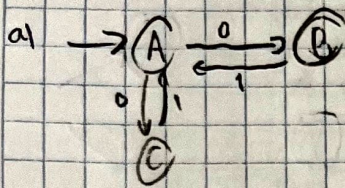


Exame 2021.

1. $0(10)^* + (01)^*0$

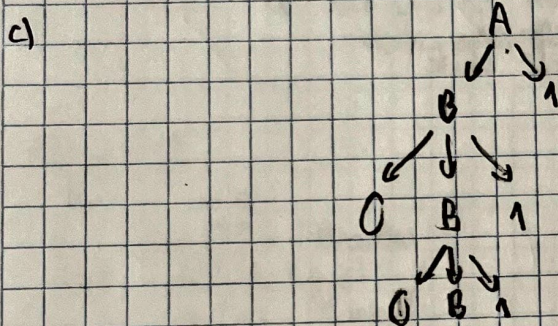


2. $L = \{0^i 1^j \mid i \geq j\}$

a) Necessária memória...

b) $\bullet A \rightarrow B1$
 $\bullet B \rightarrow 0B1$
 $\bullet B \rightarrow \epsilon$

$G_L = (\{A, B\}, \{0, 1\}, A, \{A \rightarrow B1, B \rightarrow 0B1, B \rightarrow \epsilon\})$



d)

q	x	Y	q'	S'
q ₁	ϵ	[A]	q ₁	[B, 1]
q ₁	ϵ	[B]	q ₁	[0, B, 1]
q ₁	ϵ	[B]	q ₁	[]
q ₁	0	[0]	q ₁	[]
q ₁	1	[1]	q ₁	[]

e)

- (q₁, 00111, [A])
- (q₁, 00111, [B, 1])
- (q₁, 00111, [0, B, 1, 1])
- (q₁, 0111, [B, 1, 1])
- (q₁, 0111, [0, B, 1, 1])
- (q₁, 111, [B, 1, 1])
- (q₁, 111, [ϵ , 1, 1])
- (q₁, 111, [1, 1, 1])
- (q₁, 11, [1, 1])
- (q₁, 1, [1])
- (q₁, ϵ , [])