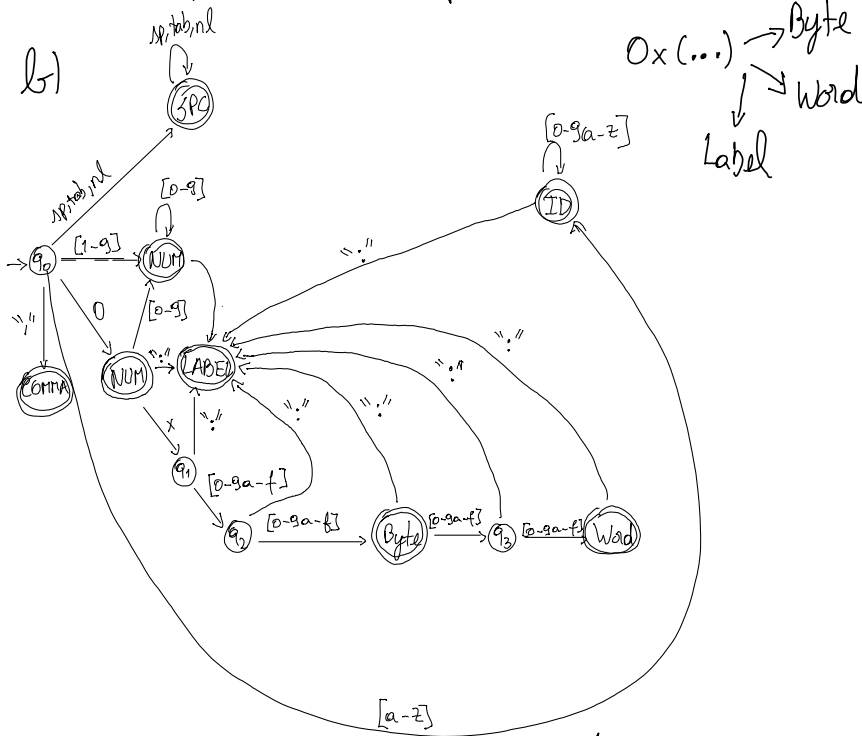


② a) Não tem nada que saber

b)



c)

```

loop: cmp 051:, 0xcd10xba:n:ab 0x123 net
      Label 5k id 5k label coma id ok spc num Id
    
```

Diagram illustrating assembly code with annotations for instruction components:

- loop:** Label
- cmp 051:,** op (opcode)
- 0xcd10xba:** word (operand 1)
- n:** nl (operand 2)
- ab** Id (operand 3)
- 0x123** Byte (operand 4)
- net** spc (operand 5)
- Label** 5k (operand 6)
- id** 5k (operand 7)
- label** 5k (operand 8)
- coma** 5k (operand 9)
- id** 5k (operand 10)
- ok** 5k (operand 11)
- spc** 5k (operand 12)
- num** 5k (operand 13)
- Id** 5k (operand 14)

③

a)

$\rightarrow q_0 \xrightarrow{f} q_1 \xrightarrow{f} (ff)$ regex: ff

$\rightarrow q_0 \xrightarrow{f} q_1 \xrightarrow{i} (fi)$ regex: fi

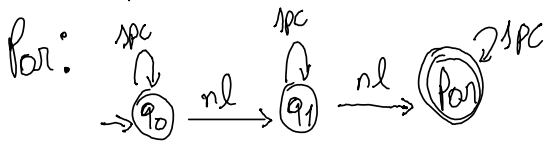
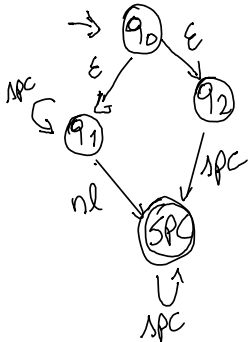
$\rightarrow q_0 \xrightarrow{f} q_1 \xrightarrow{l} (fl)$ regex: fl

$\rightarrow q_0 \xrightarrow{f} q_1 \xrightarrow{f} q_2 \xrightarrow{i} (ffi)$ regex: ffi

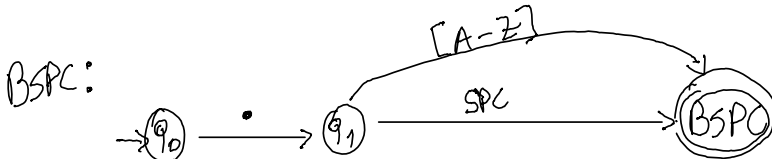
$\rightarrow q_0 \xrightarrow{f} q_1 \xrightarrow{f} q_2 \xrightarrow{l} (ffl)$ regex: ffl

$\rightarrow q_0 \xrightarrow{\cdot} q_1 \xrightarrow{\cdot} q_2 \xrightarrow{\cdot} (fff)$ regex: ...

regex: $[spc^*nl\ spc^*! \ spc^+]$



regex: $spc^*nl\ spc^*nl\ spc^*$



c) $\Sigma = \{f, i, l, \cdot, spc, nl, [A-Z], \epsilon\}$

$$256 \times |Q| = 2048$$