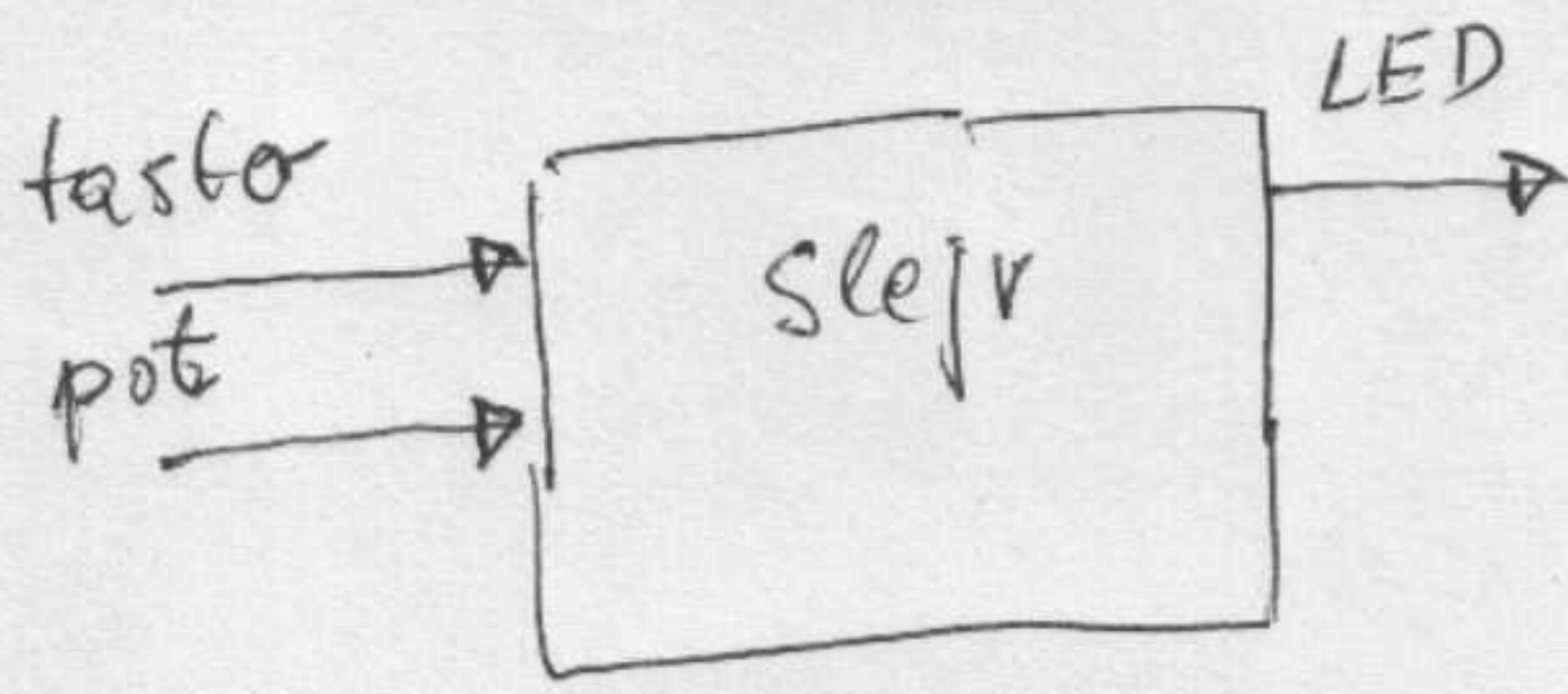


Zadatak 3

1



start/stop pumpe
 potencijometar / an. ukaz
 za protok vod

LED dioda - za pumpe
 LED dioda - za alarm

10.99.12.1 / _____

definisuje program

1°

PXX HHMM YYYY
 redni broj programa
 vreme poctra

xx ∈ {0 - 15}
 HHMM sati minuti
 YYYY broj sekundi

P00 (1701) (0060)

slejr

2°

6XX YY
 redni broj baste

603 (00)

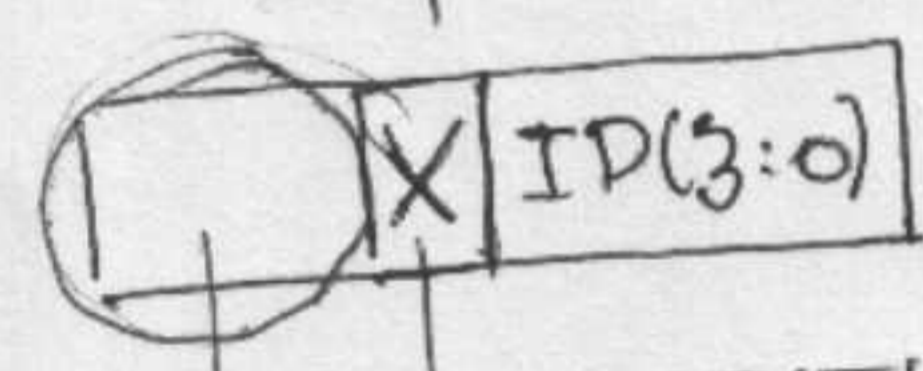
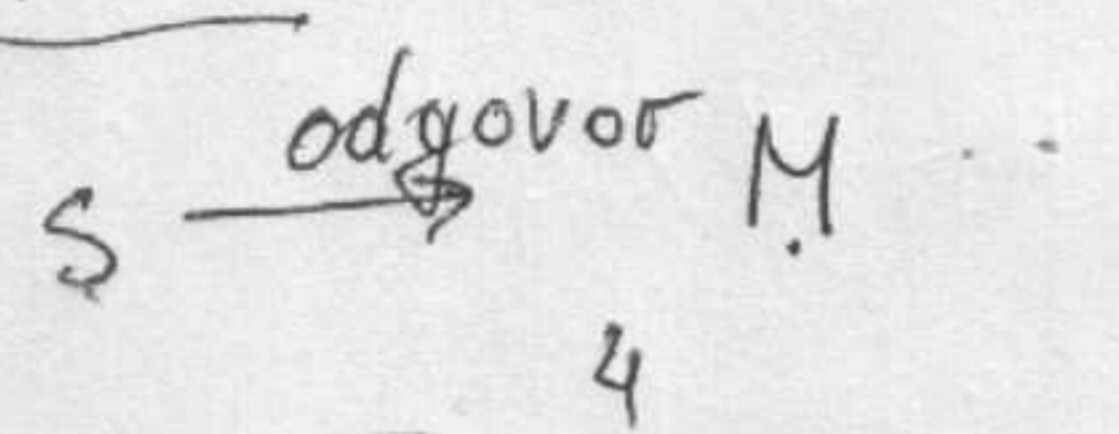
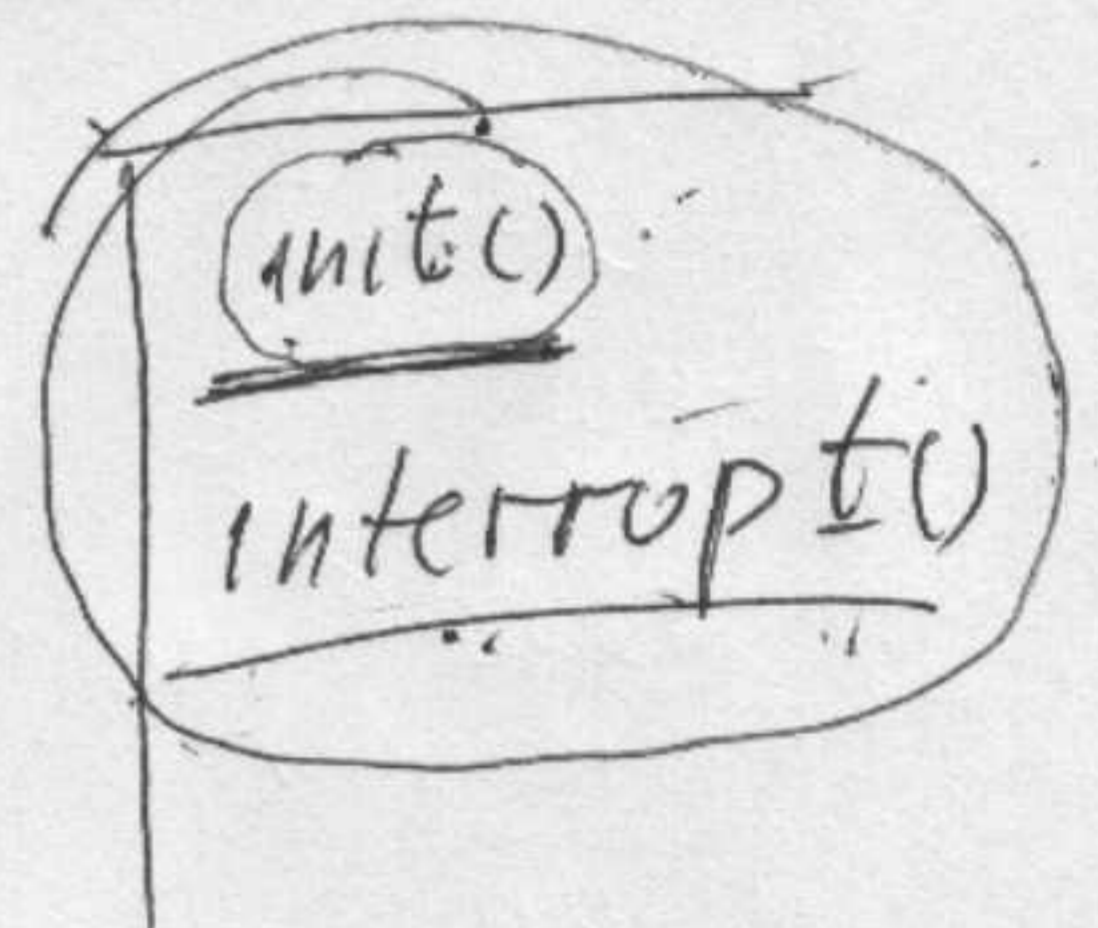
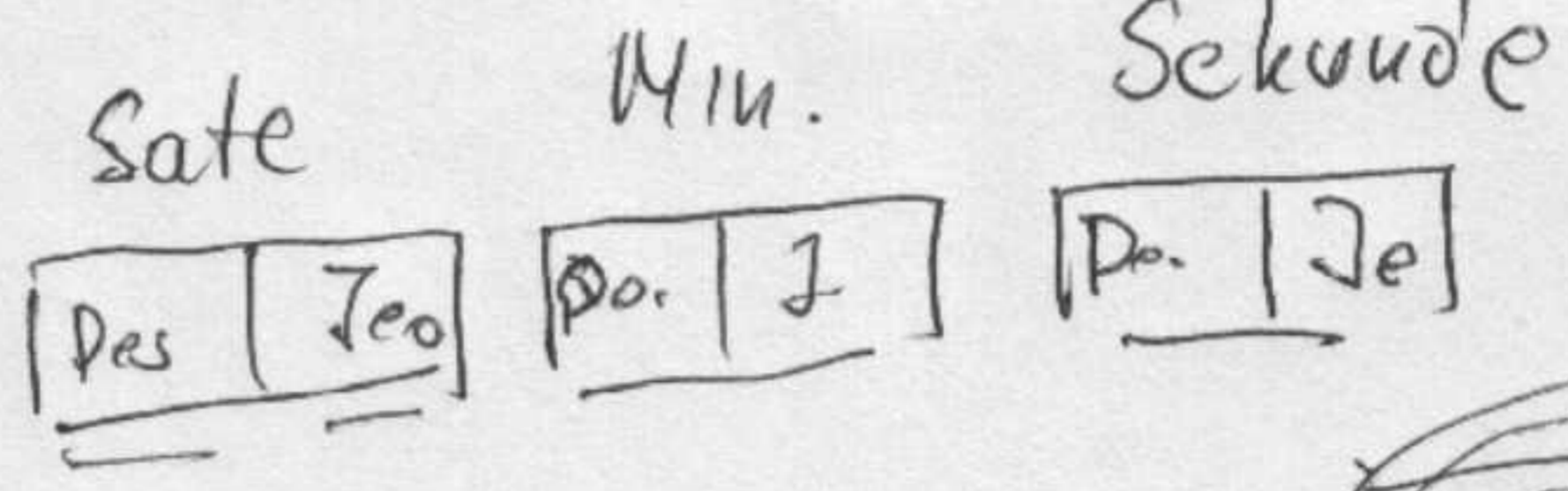
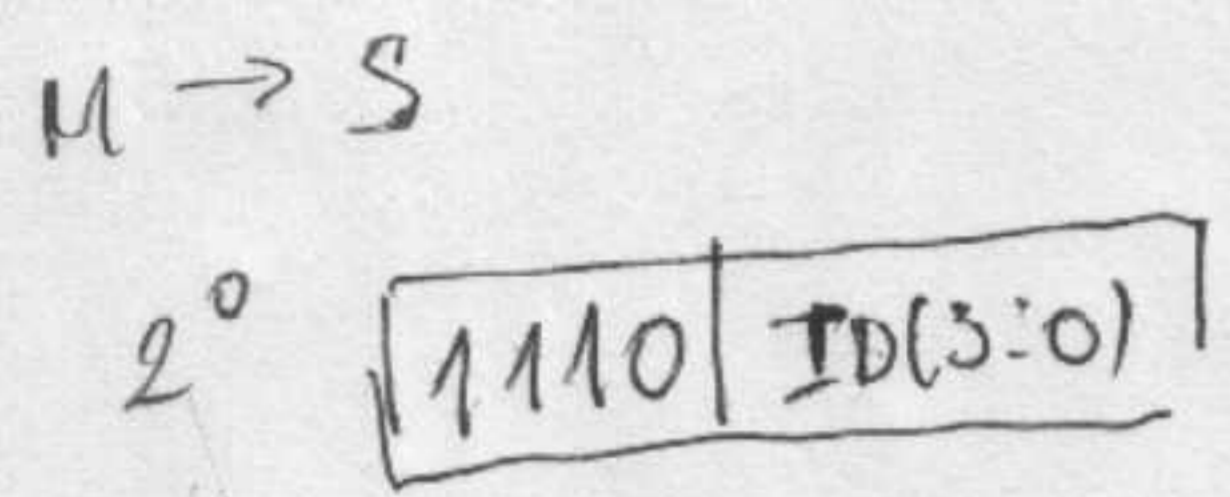
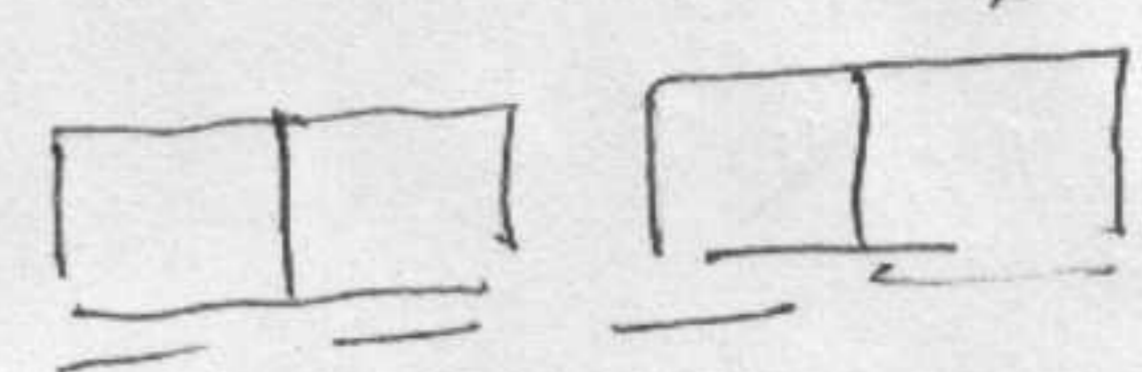
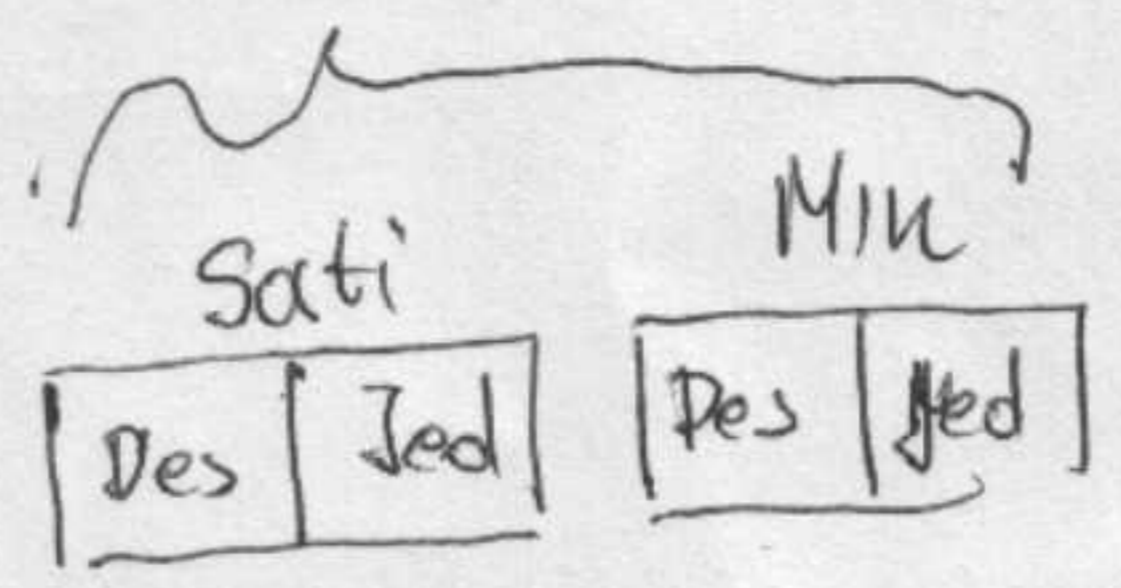
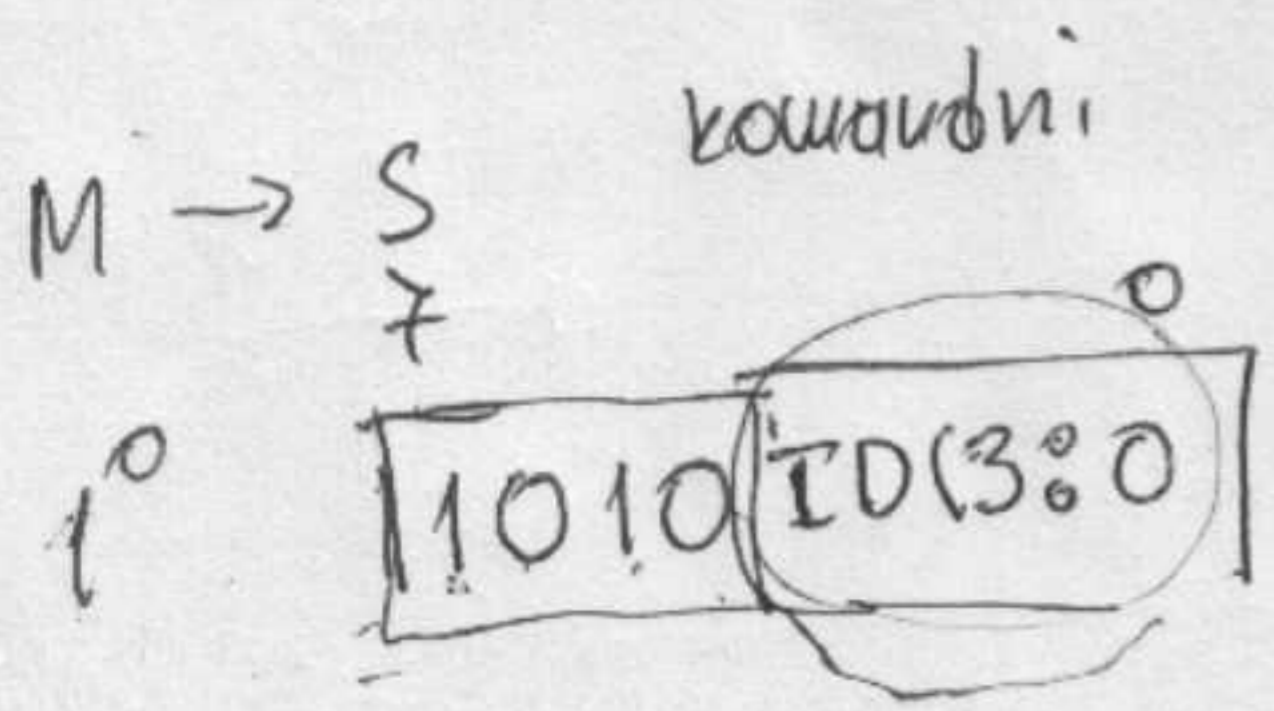
3°

IP / HHMMSS
 70000

za podešavanje sata
 realnog vremena

M → S Zadotak (2)

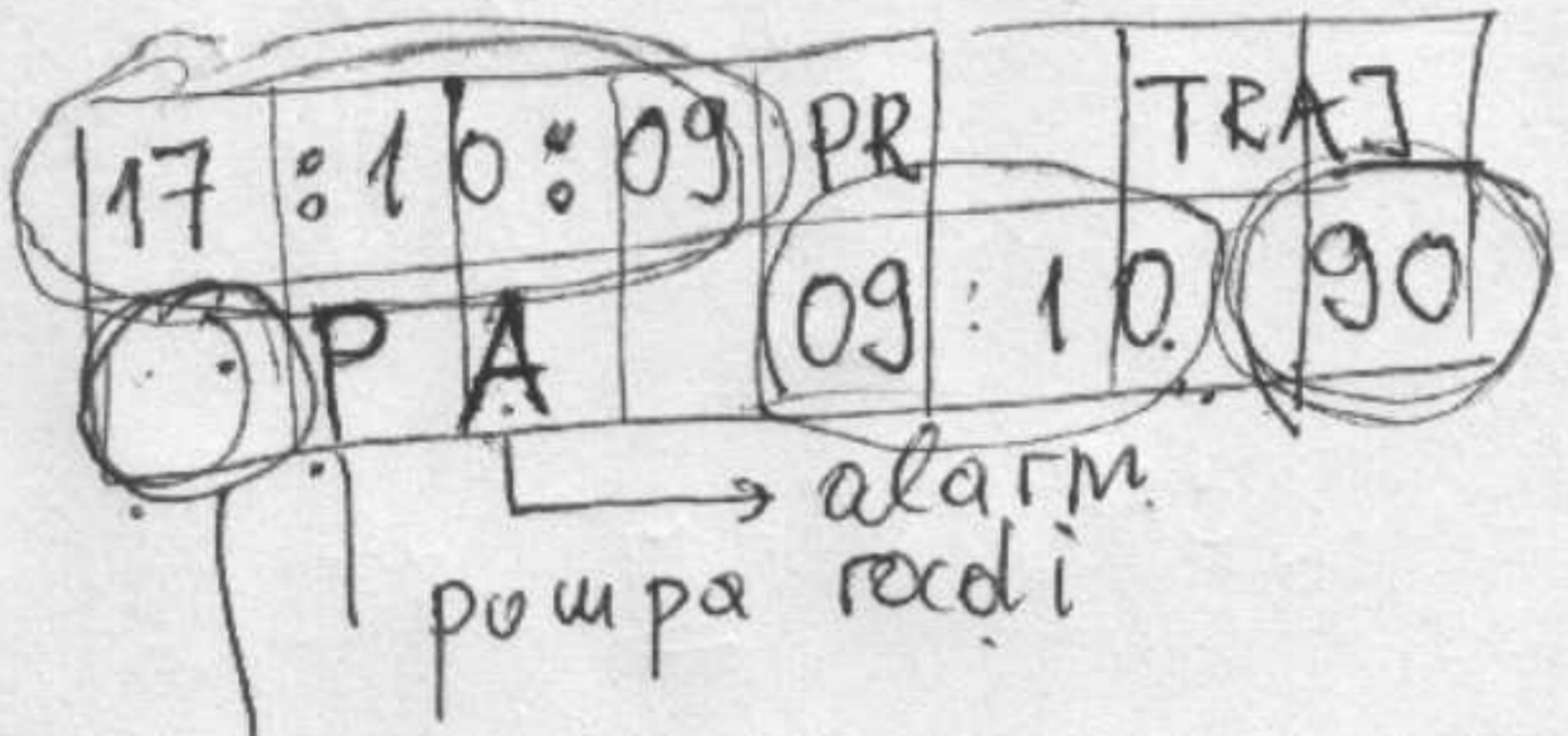
0 - 9999 s
TRAJANJE



STATUS PUMPE x ∈ {0,1}

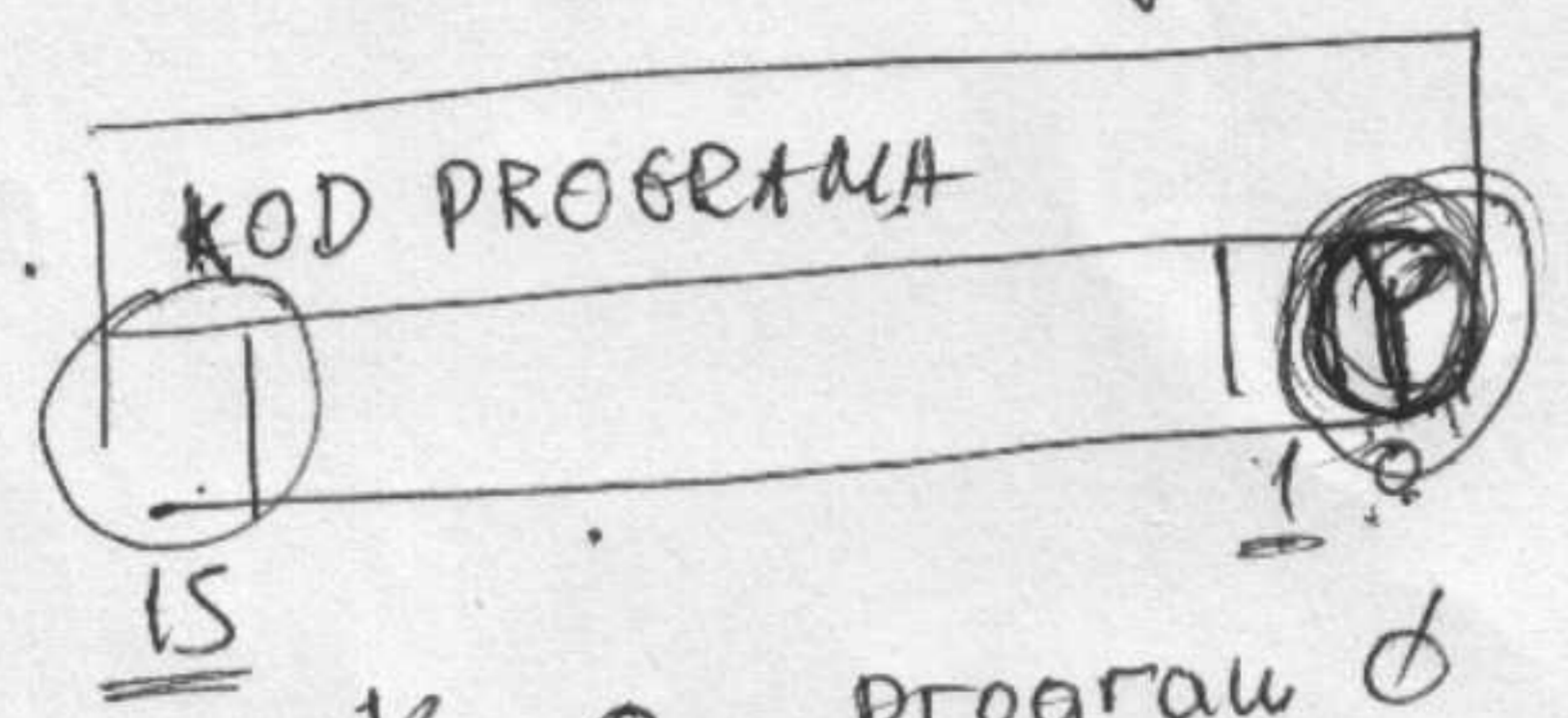
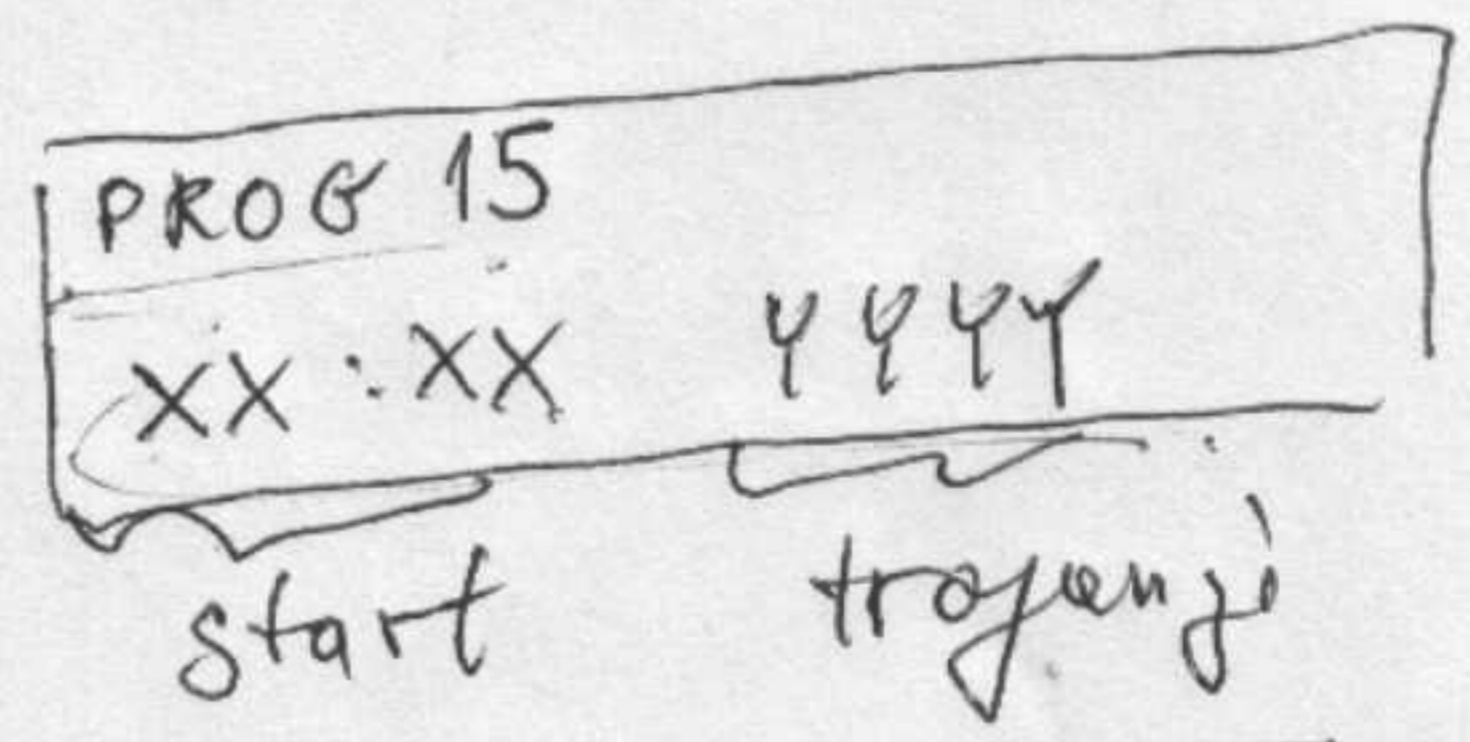
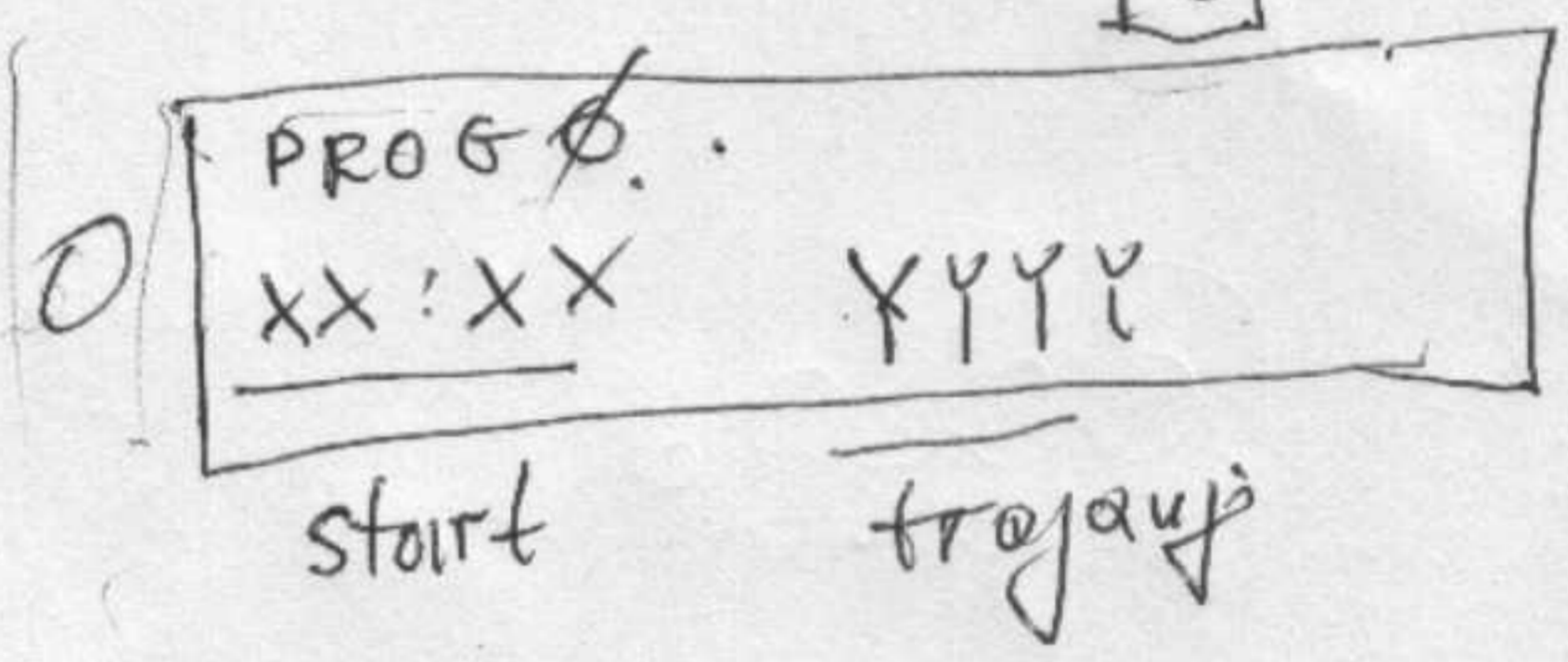
101
111

Sleju.

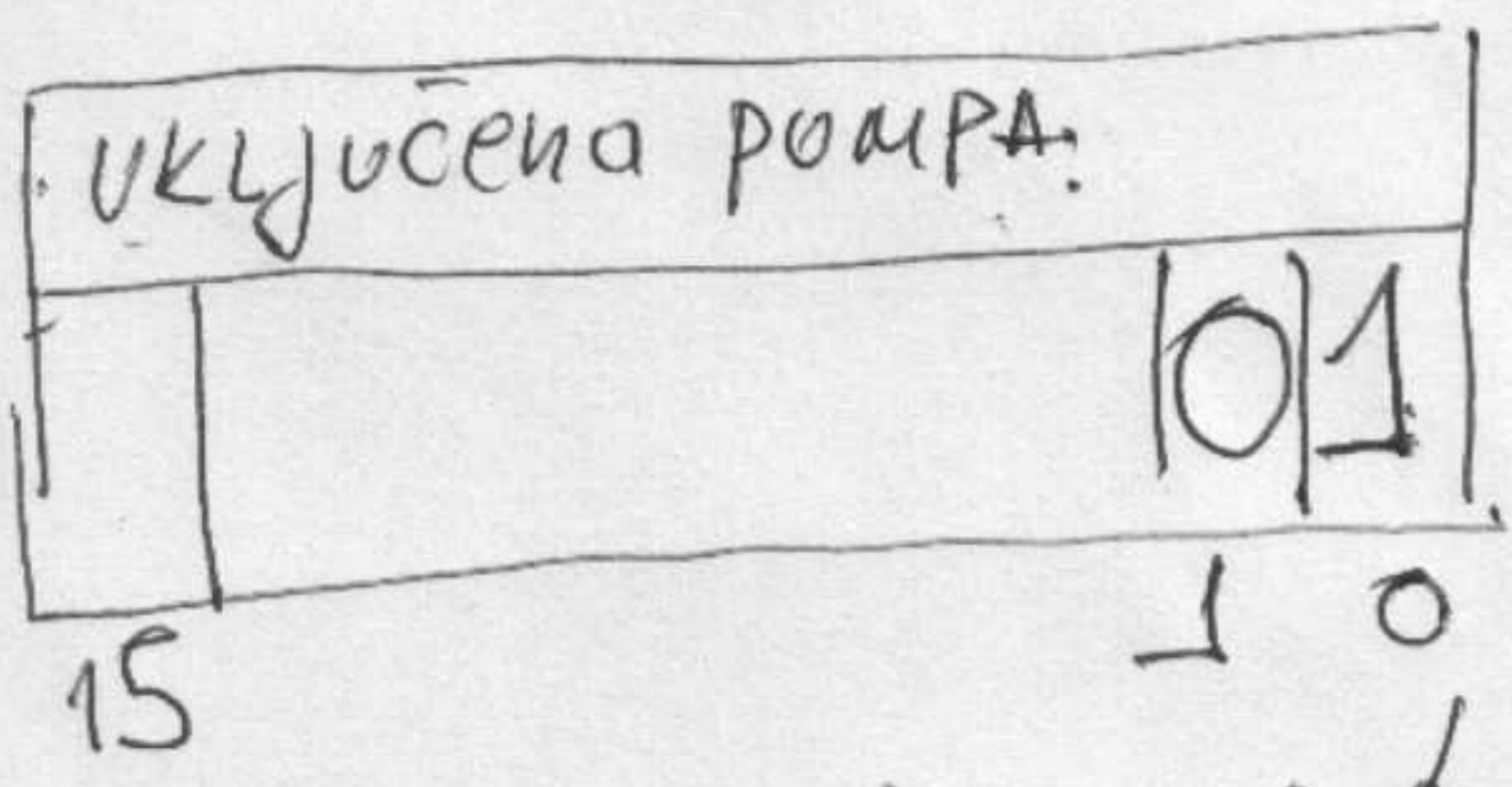


protok 0-99

[20, 80]

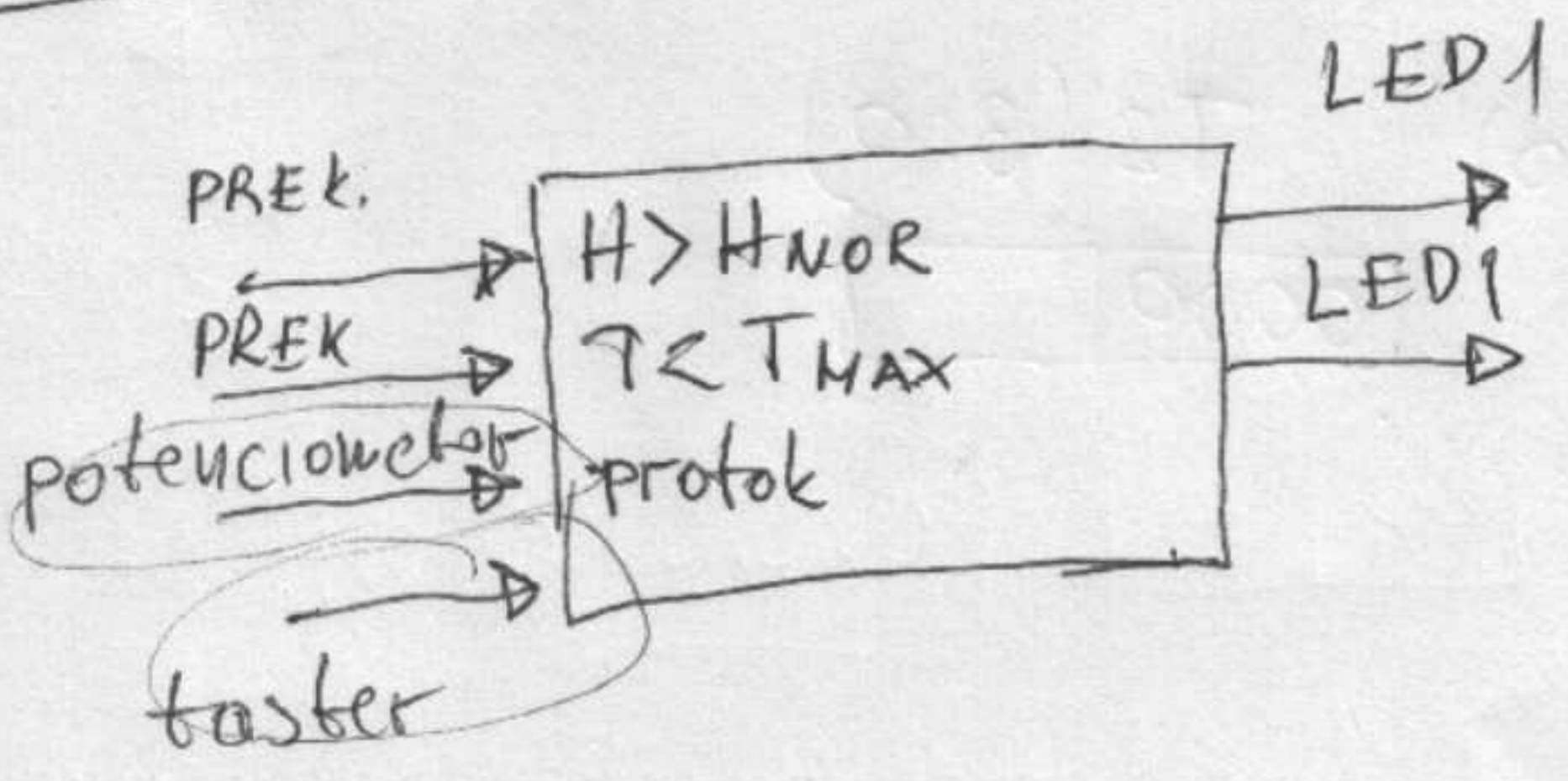


Y = 0 program 0
9 program 9
Y ∈ {0x30 - 0x3F}



Pumpa ∈ {0,1}

Zadatok 4



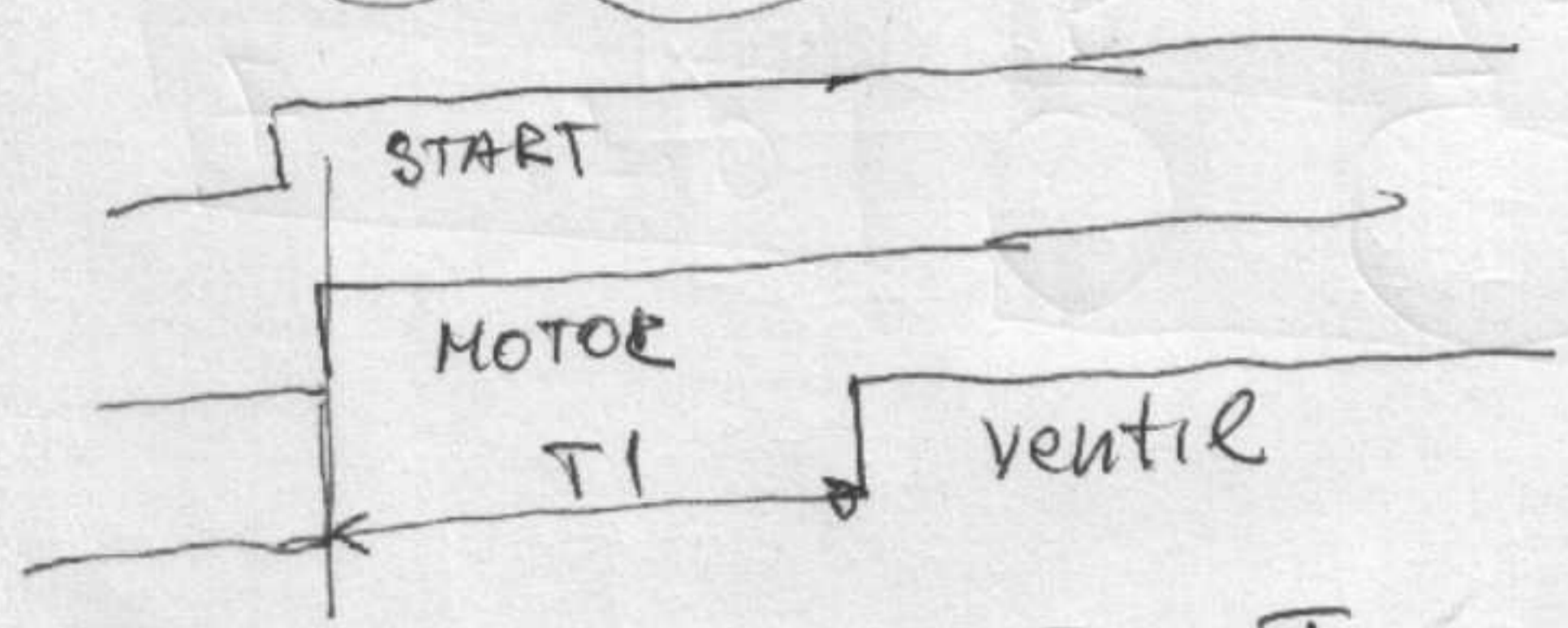
$H > H_{NOR} = 1$
 $T < T_{MAX} = 1$
 =
 normalna stanja
 roba

potenciometer →
 analogni signal
 protok vode

taster - START

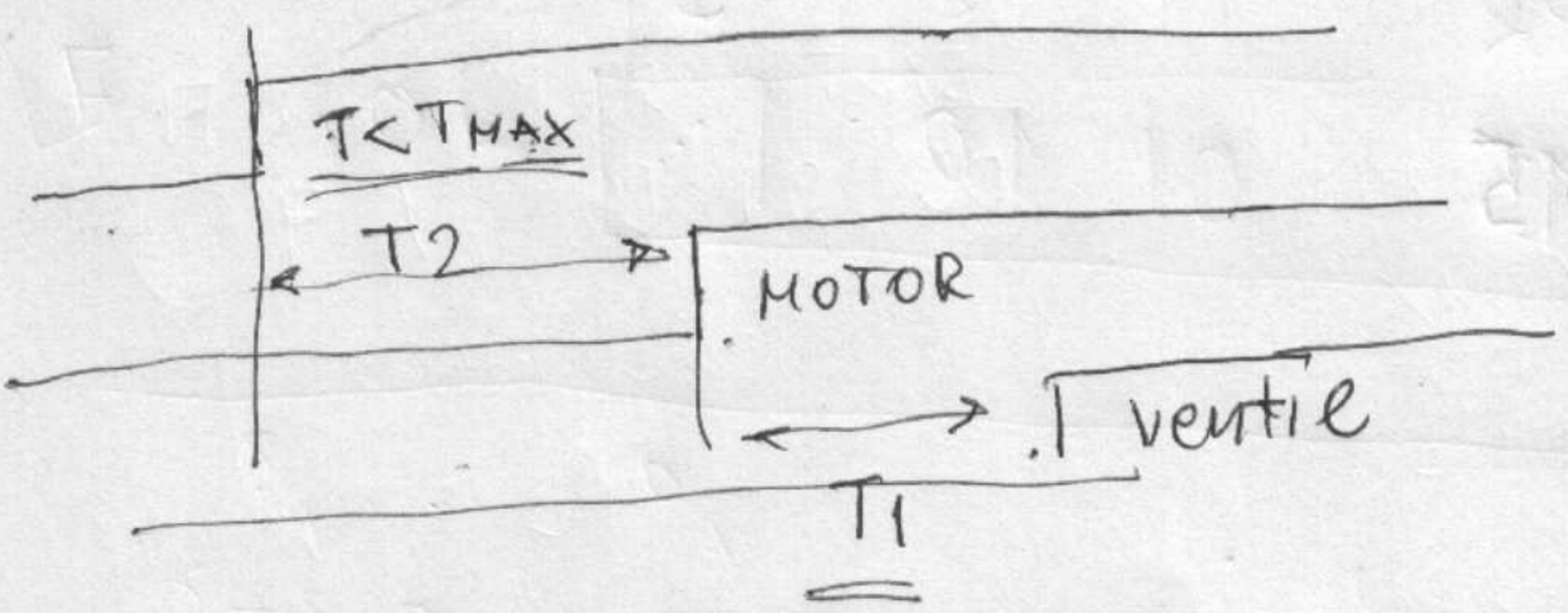
LED1 - motor
 LED2 - pu ventil

T1 ; T2



$H > H_{NOR}$
 $T < T_{MAX}$

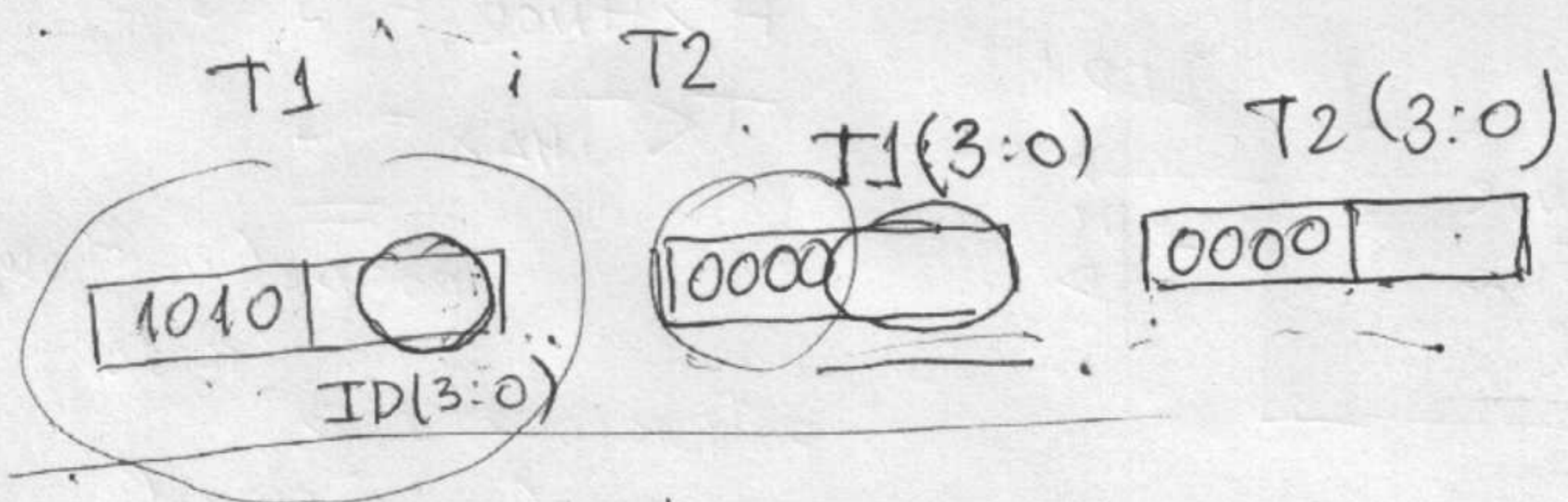
ponovo $T < T_{MAX}$ (nastovak rada)



o programiranju vrev.

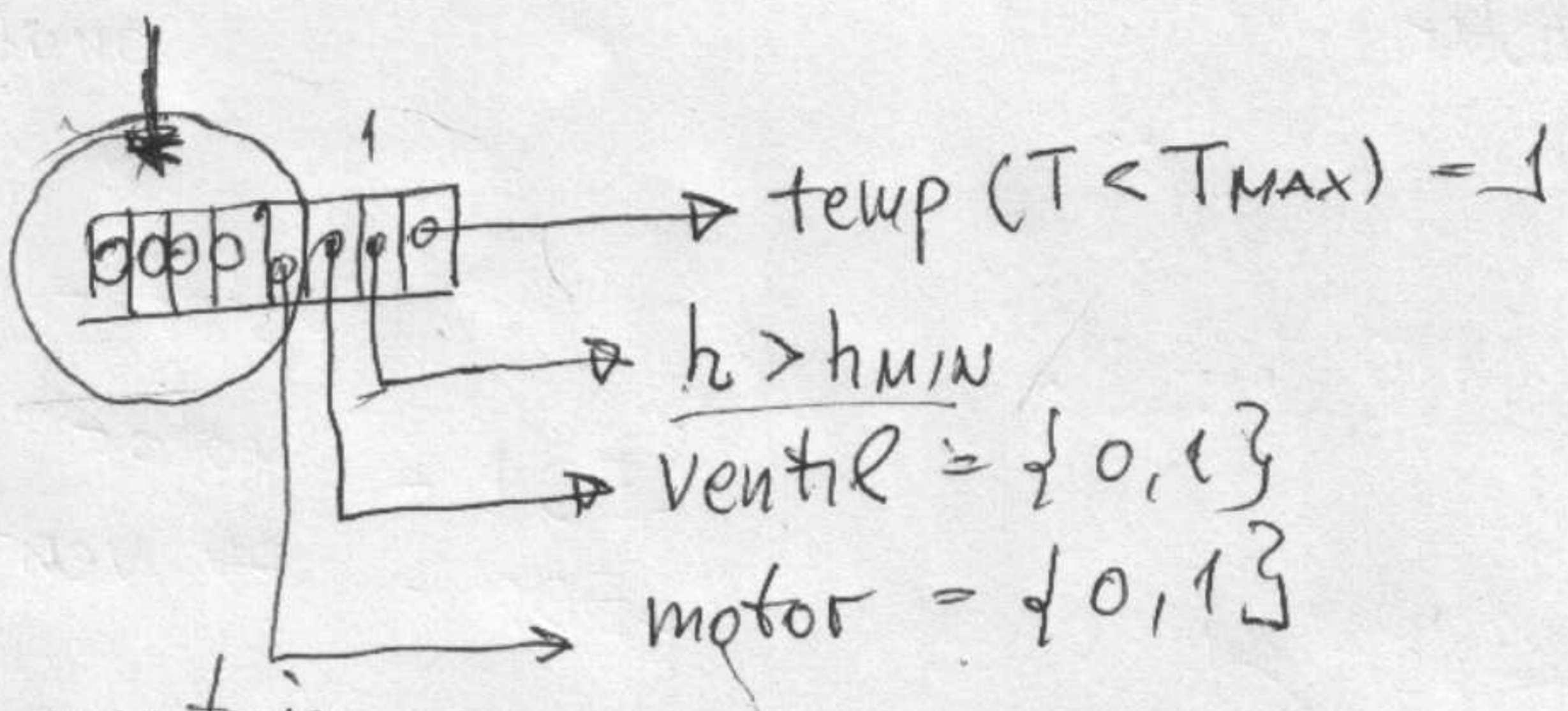
M → S

T1 i T2



S → M

1010 ID(3:0)



Displayu sloj uređaja

H	T	M	V	PR	T1	T2	S
0	1	0	1	00	0	0	0

PR ∈ {0 - 15}

0, 1, ..., 7

H	T	M	V	PR	T1	T2	S
0	1	0	1	15	01	10	1

20, ... #

10.99.12.1 / 1
~~t1 X~~
 t2 Y

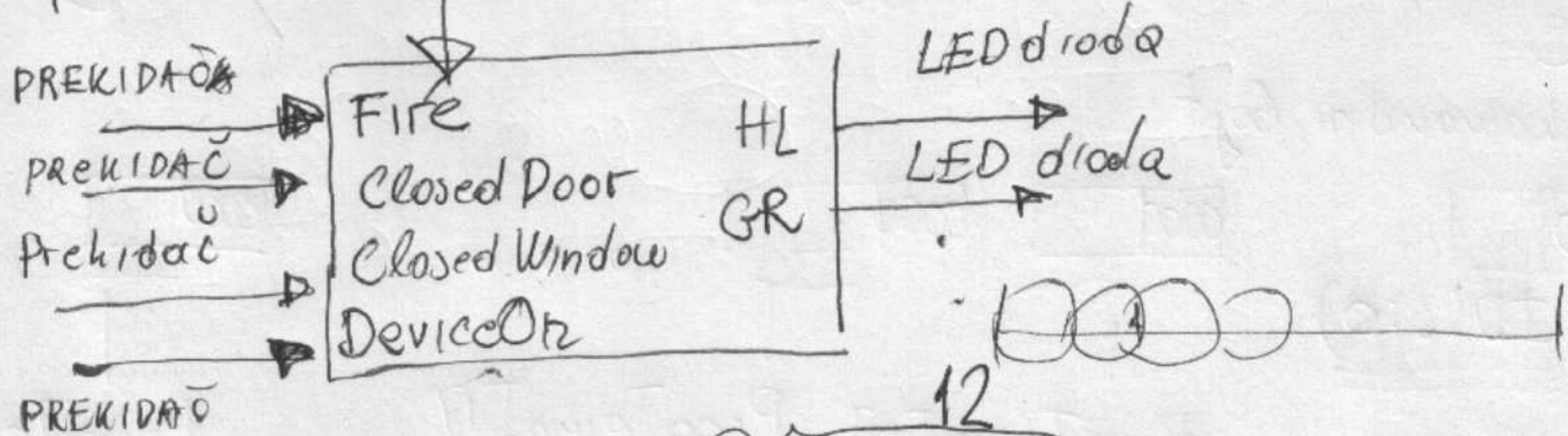
$x \in \{0x30 - 0x3F\}$
 $y \in \{0x30 - 0x3F\}$

S

interrupt()

Temp. 0-15 Slejv
potenc.

Zadatok 5



10.99.12.1 / p X Y Y Y

redni broj programa $X \in \{0, \dots, 7\}$

$Y \in \{0x30, \dots, 0x3F\}$

15 $15 \rightarrow 31^\circ$

$0x30 \rightarrow 15^\circ$

$0x3F \rightarrow 31^\circ$

10.99.12.1 / o SP → br. prog. $P \in \{0x30 - 0x3F\}$
 ID broj objekta $S = \{0x30 - 0x3F\}$

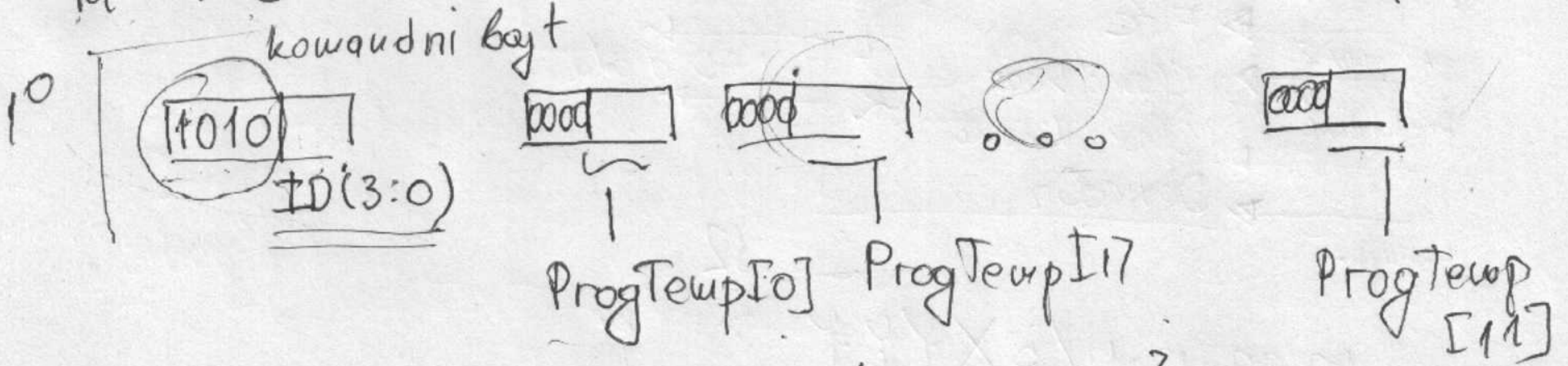
10.99.12.1 / r (HHMMSS)

RS485 komunikacija

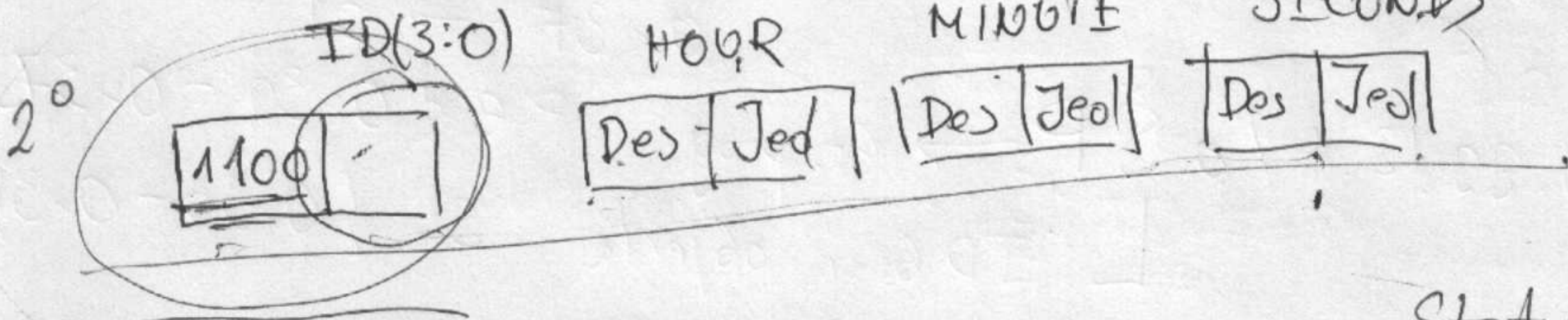
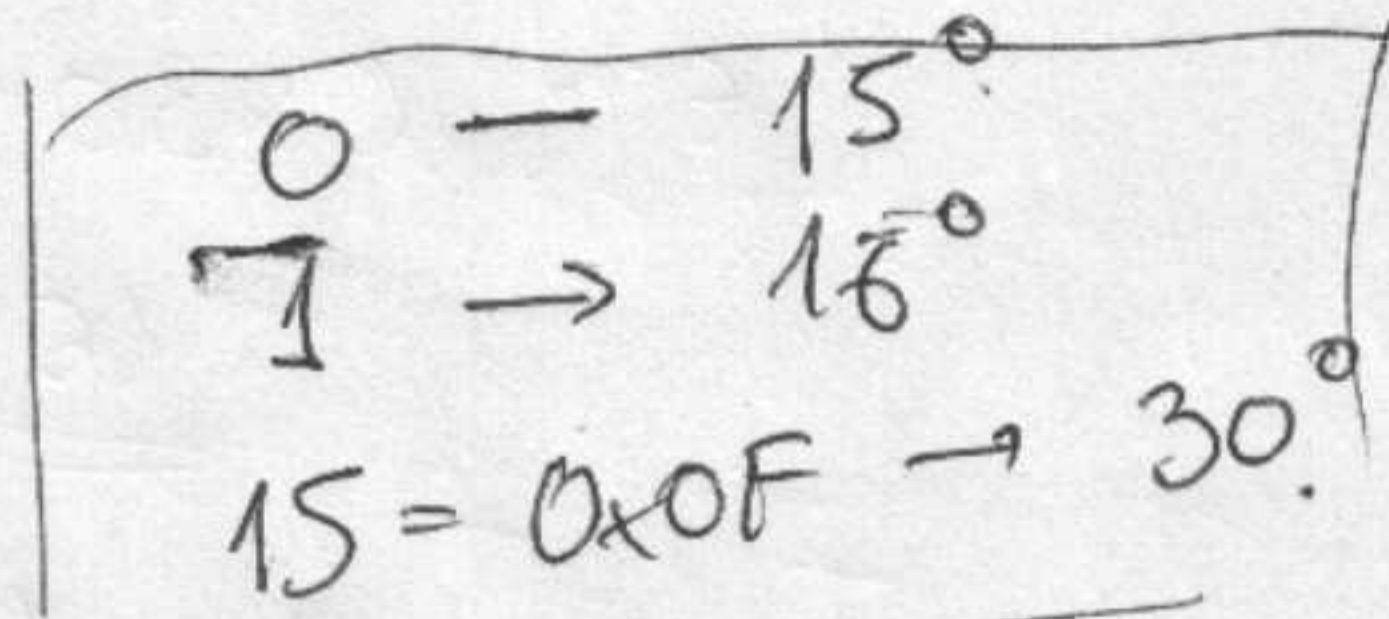
M ↔ S

Zadator S ✓

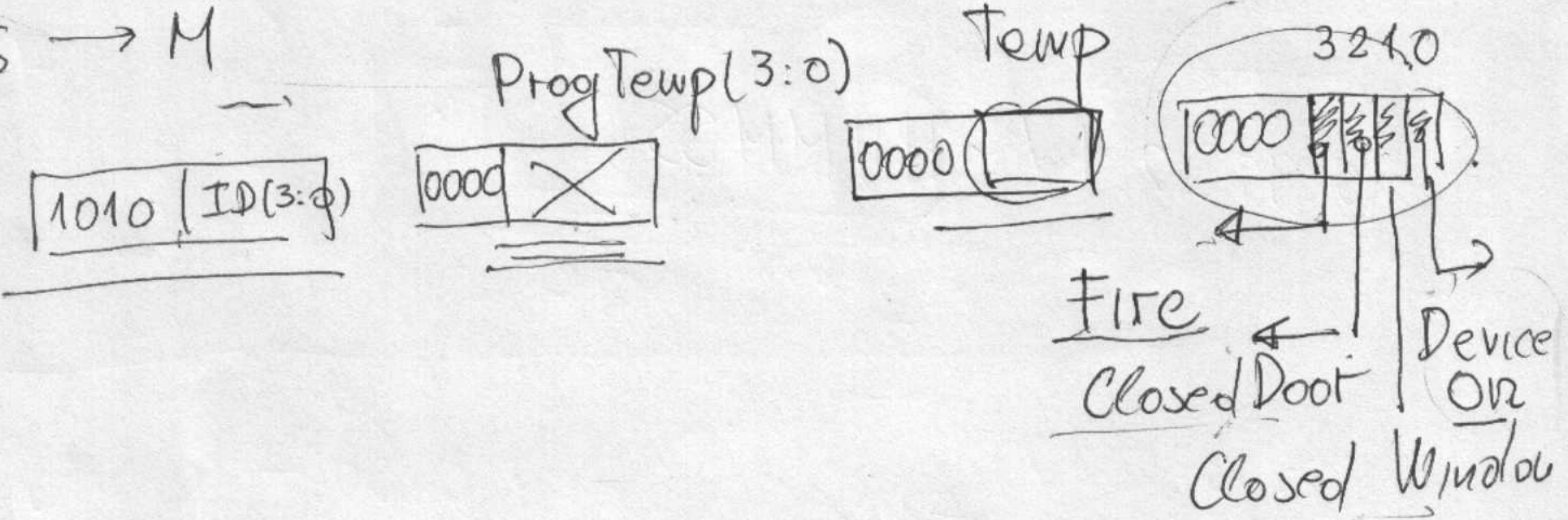
M → S

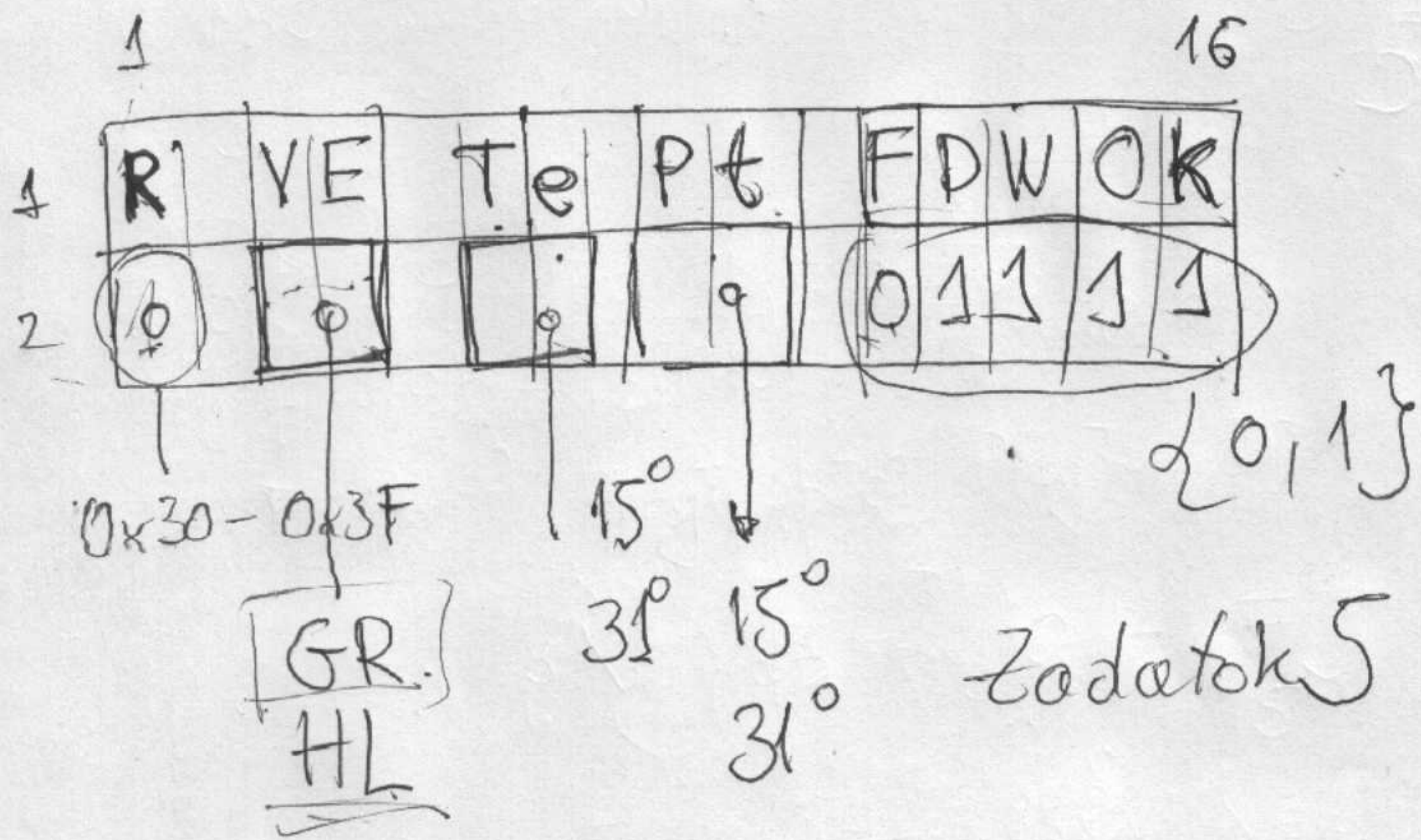


ProgTemp = { 0 - F }
0 - 15

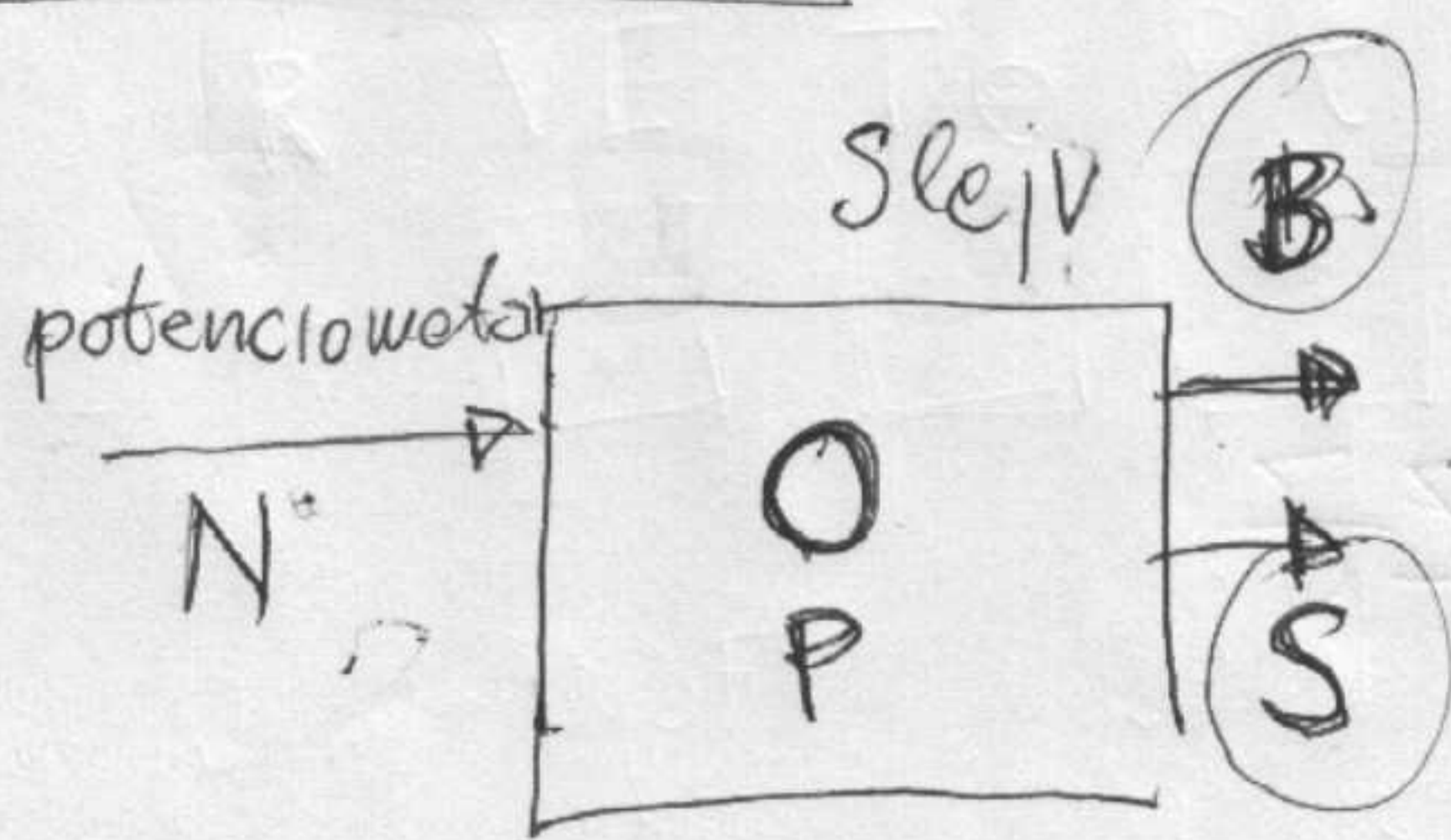


S → M





Zadatak 6



spoljšanje osvetljene

[0, 99]

0

99

B - brisoleji = [0, 99]

S - jačina signala [0, 99]

○ - osvetljenje koje se programira

modovi rada

0 - max. otv. brisoleji $\Rightarrow B=99 \quad S=0$

1 - privatnosti $\Rightarrow B=0 \quad S=50$

2 - intimni mod $B=0 \quad S=20$

3 - noć $B=0 \quad S=0$

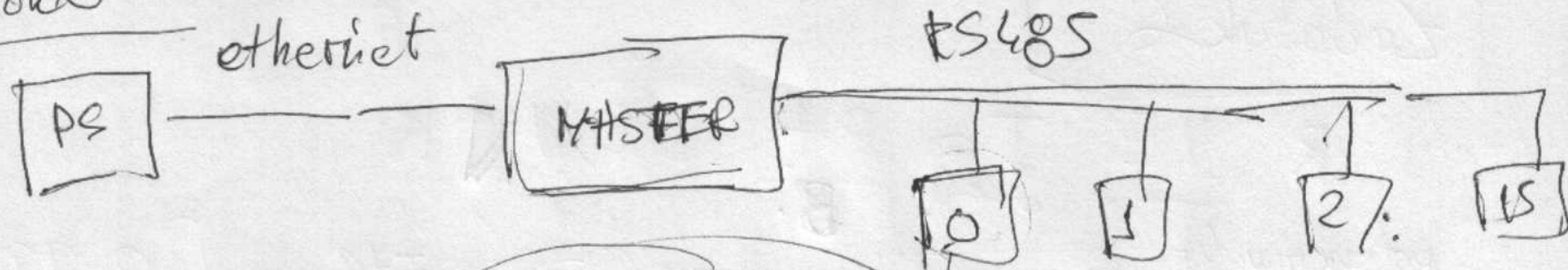
4 - program spolj. osv. brisolej signale
zadeta osve

○

$$\frac{N+B}{100} + S$$

B S ?

Zadatak 6

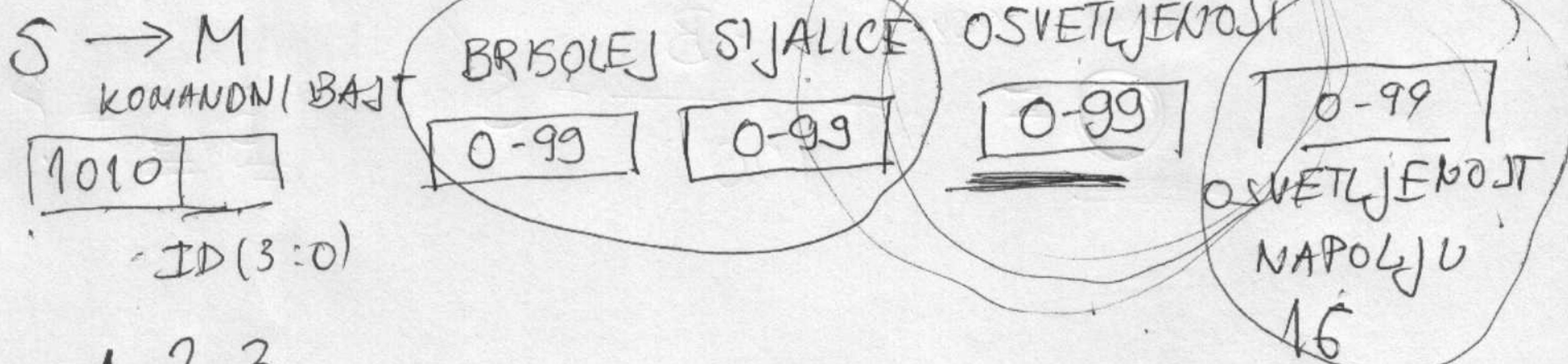
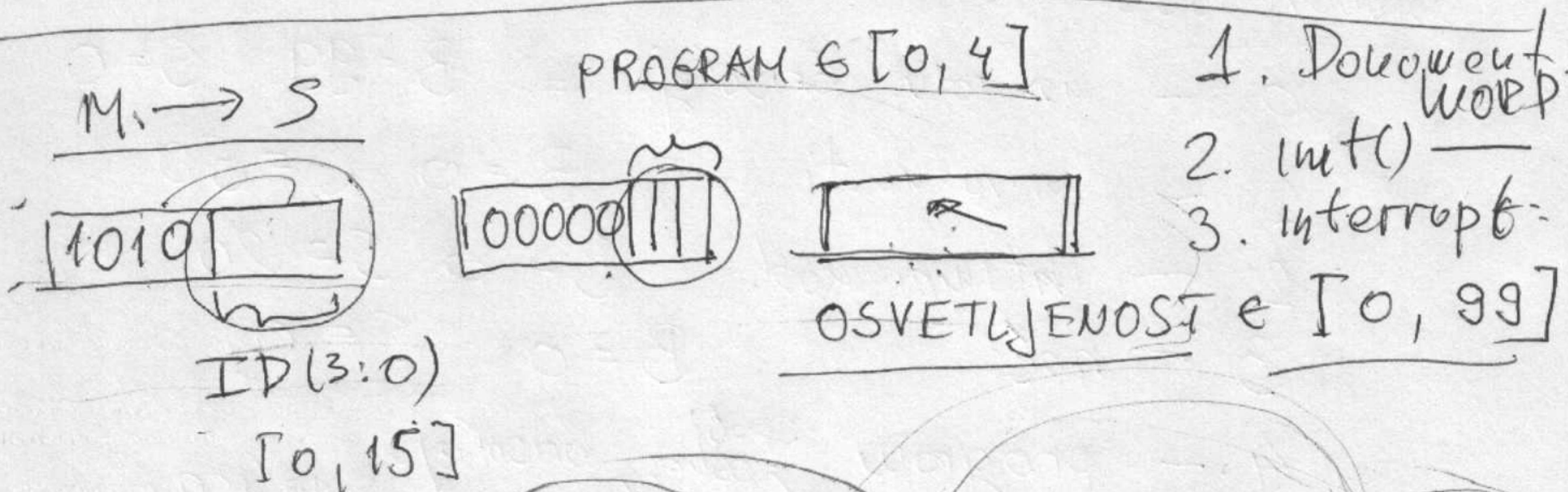


10.99.12.1 / PXX Y ZZ
 redni broj slejva

redni broj programa $Y = \{0, \dots, 4\}$
 $ZZ = \{0, \dots, 99\}$

B = ?
S = ?

RS485

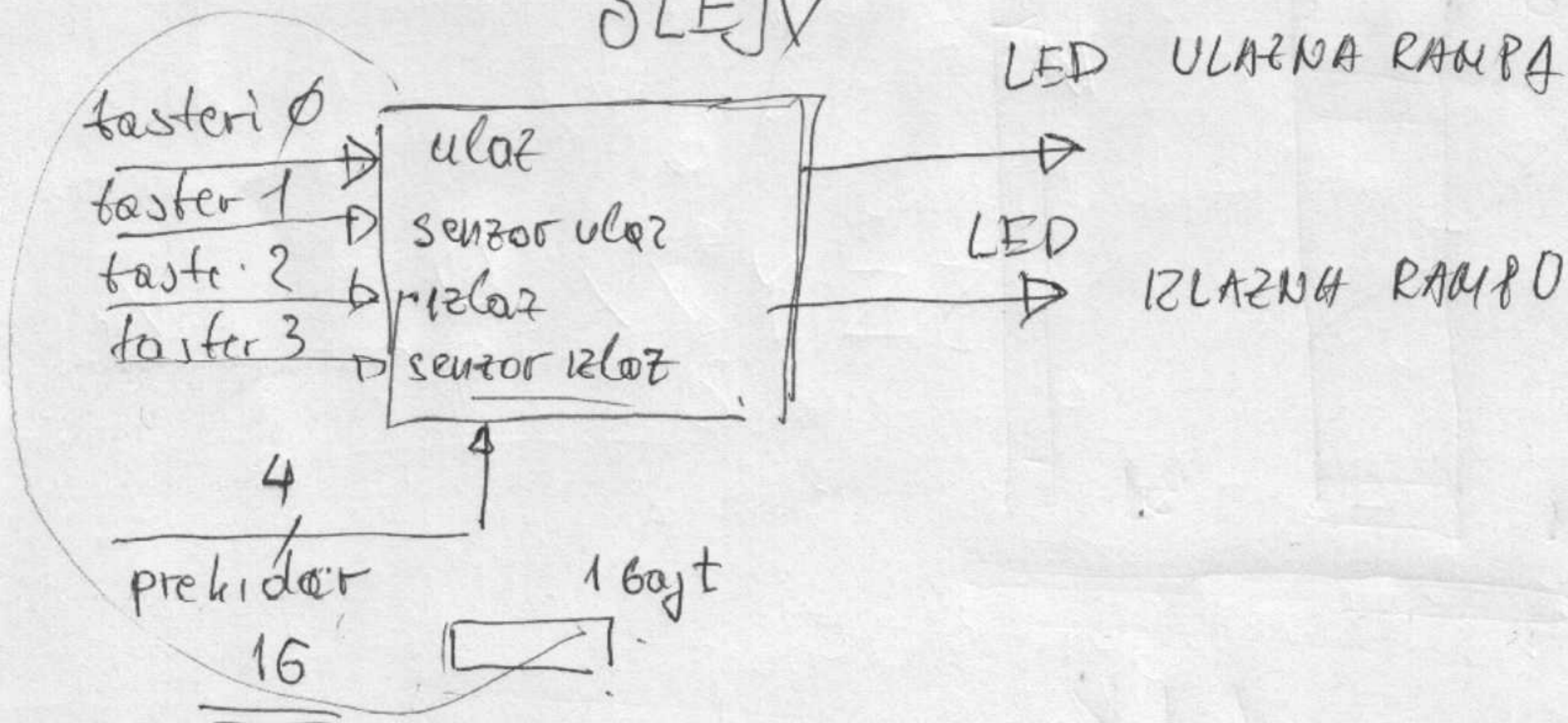


	1	2	3						
1	NA	OS	SI	BR	PR	SL			
2	XX	XX	XX	XX	XX	XX	XX	XX	
	99	30	85	15	0-4				

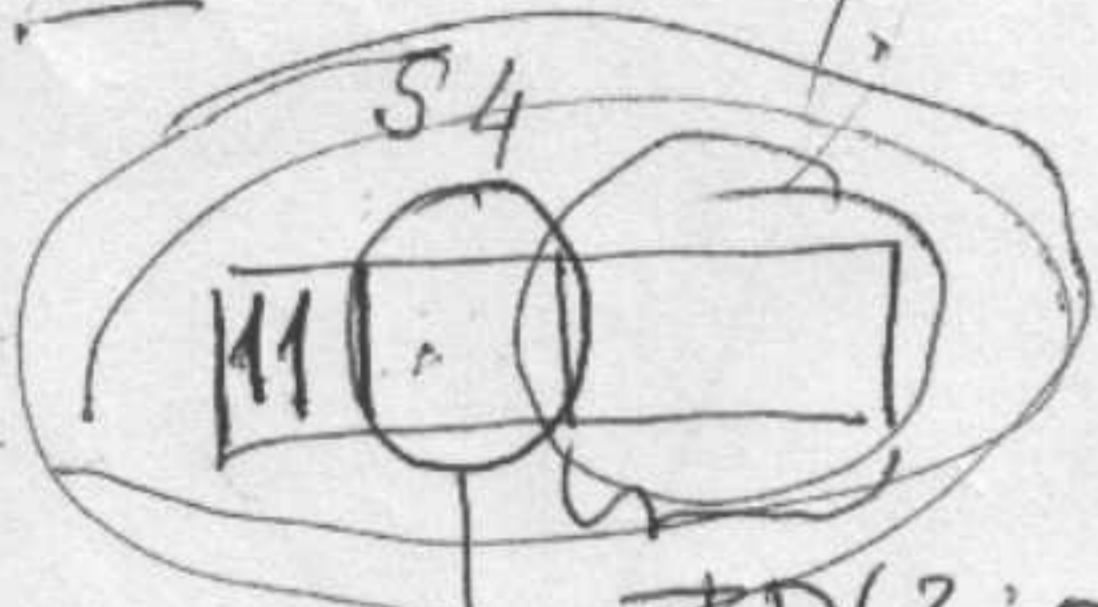
Zadatek 7

AQUA PARK

SLEJV



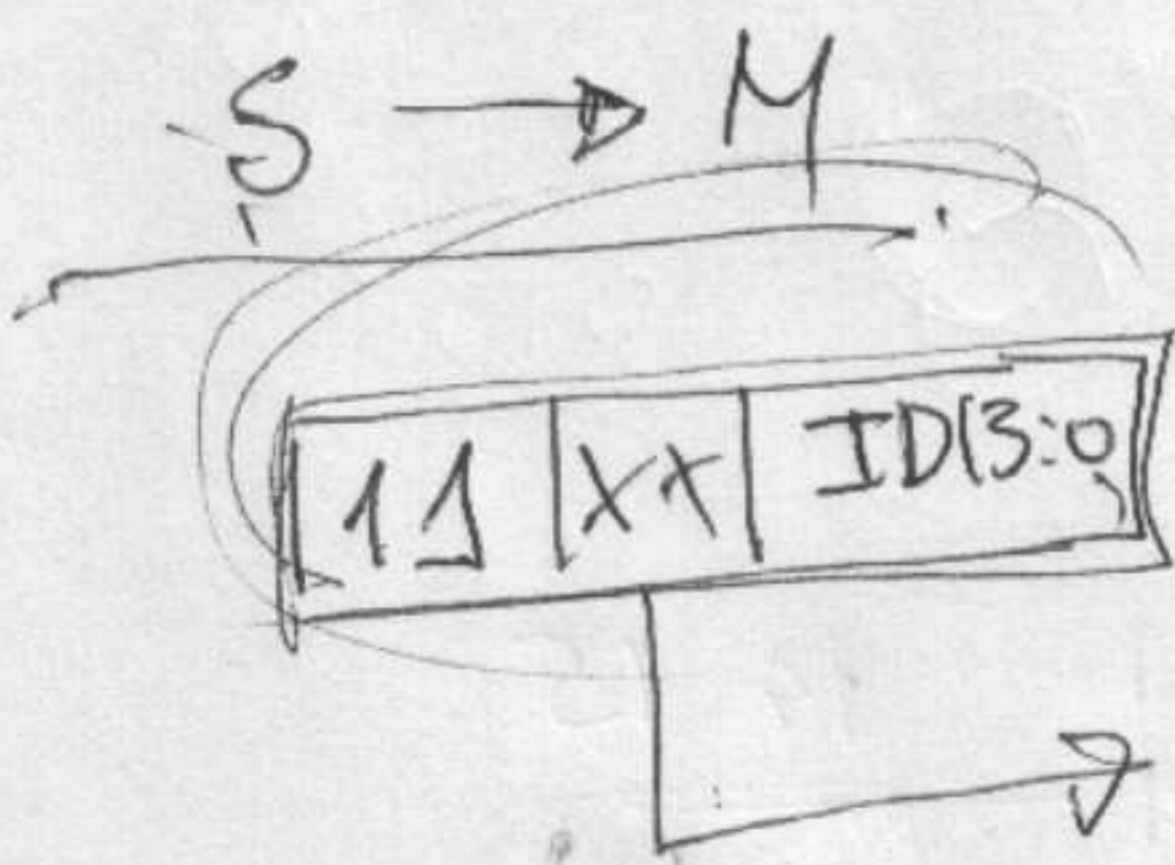
M \leftrightarrow S_0, S_1, \dots, S_{15}



$ID(3:0) = \{0, \dots, 15\}$

ID(3:0)

- 01 odobren zahtev za ulaz
- 10 odobren zahtev za izlaz
- 00 nista

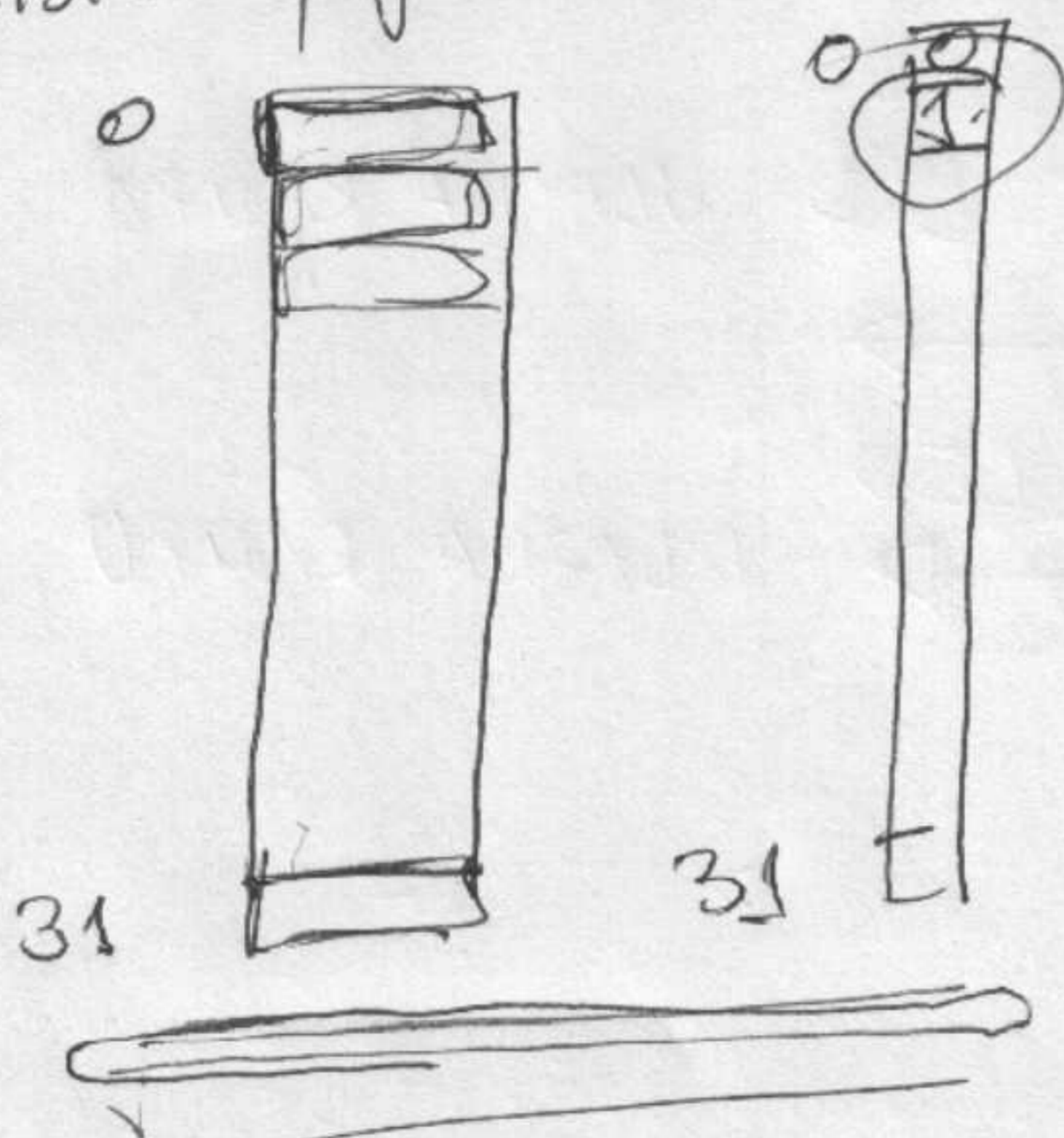


kod kartice

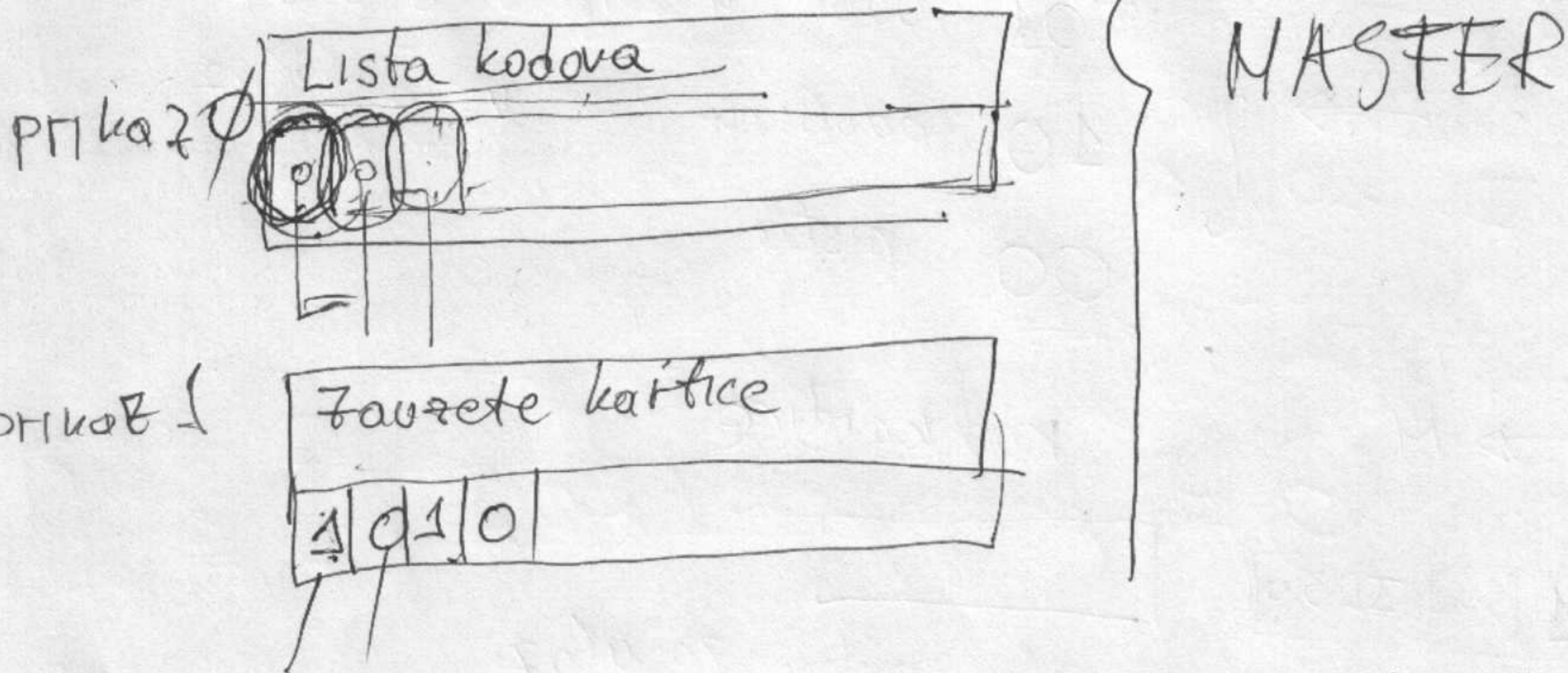
01 zahtev za ulaz
10 zahtev za izlaz
00 nista

Listu kupljenih kartica

Niz iskorišćenih kartica



10.99.12.1 / d K }
 10.99.12.1 / r } k e 2 0 - 2 5 5 }
 10.99.12.1 / s } resetuj listu kartica
 — protivka



SLEJV

	1	2	3	4					14	15
1	U	I							K	
2	1	1							K	
	0	0							K	