

4. ished

		01	11	10
	00	01	10	10
4.	AB	01	10	A
CD	00	1	1	
	01	1	1	1
	11		1	1
	10	1	1	

0	0	0	1	0
0	0	0	1	0
0	0	1	1	0
0	0	1	1	0
0	1	0	1	0
0	1	0	1	0
0	1	1	0	1
0	1	1	0	1
1	0	0	1	0
1	0	0	1	0
1	0	1	1	0
1	1	0	1	0
1	1	0	1	0
1	1	1	0	1
1	1	1	0	1

$$\bar{A}\bar{B}C\bar{D}$$

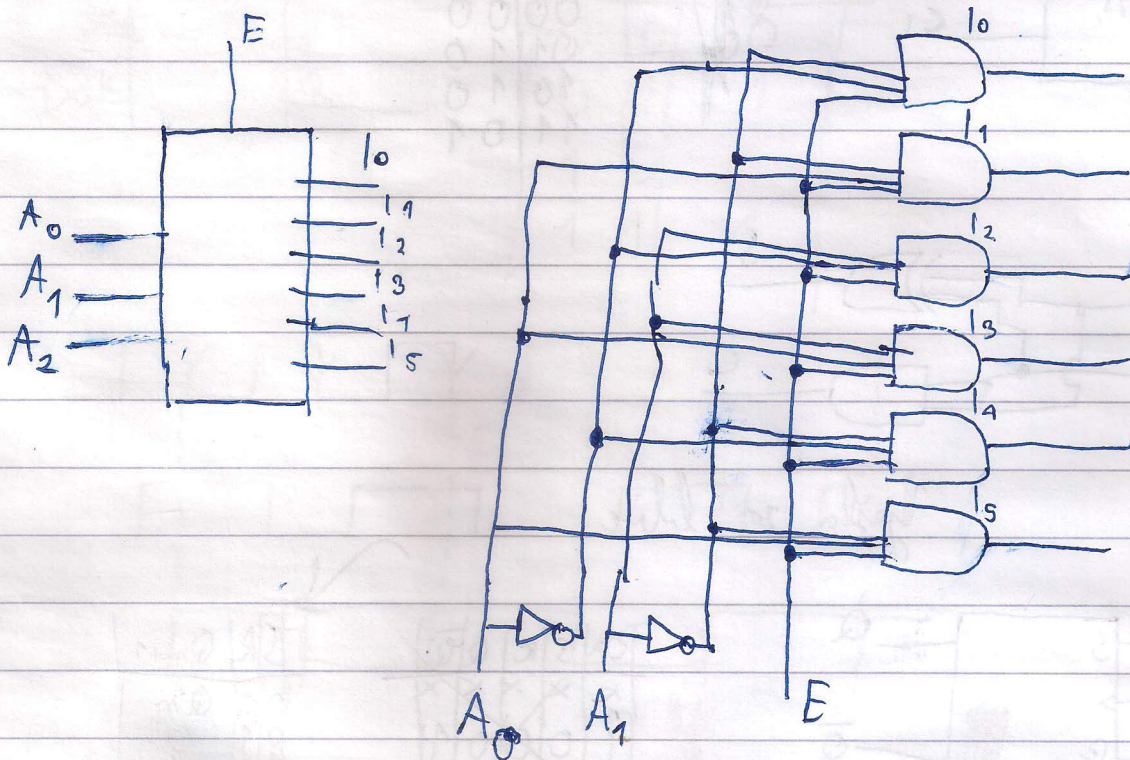
$$\bar{A}C$$

$$\bar{A}B\bar{C}D$$

$$\bar{A}D$$

$$\bar{A}C + \bar{A}D + BD$$

# Kombinacijski sklopovi



$A_0$	$A_1$	$A_2$	$E$	$l_0$	$l_1$	$l_2$	$l_3$	$l_4$	$l_5$
x	x	x	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0
0	0	1	1	0	1	0	0	0	0
0	1	0	1	0	0	1	0	0	0
0	1	1	1	0	0	0	1	0	0
1	0	0	1	0	0	0	0	1	0
1	0	1	1	0	0	0	0	0	1

$$l_0 = \bar{A}\bar{B}E$$

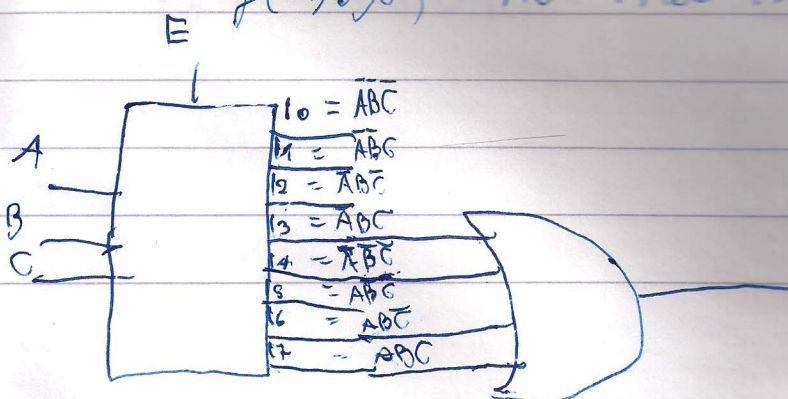
$$f(A,B,C) = \bar{A}BC + A\bar{C} + ABC$$

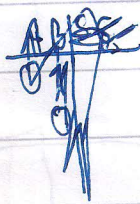
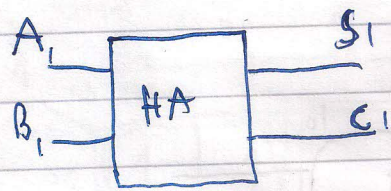
$$g(A,B,C) = \bar{A}BC + ABC\bar{C} + \bar{A}B$$

$$\bar{A}C(B\bar{B})$$

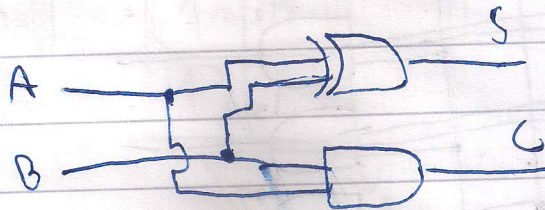
$$A\bar{C}B + A\bar{C}\bar{B}$$

$$A\bar{B}C + A\bar{B}\bar{C}$$



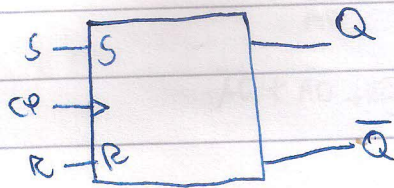


AB	SC
00	00
01	10
10	10
11	01



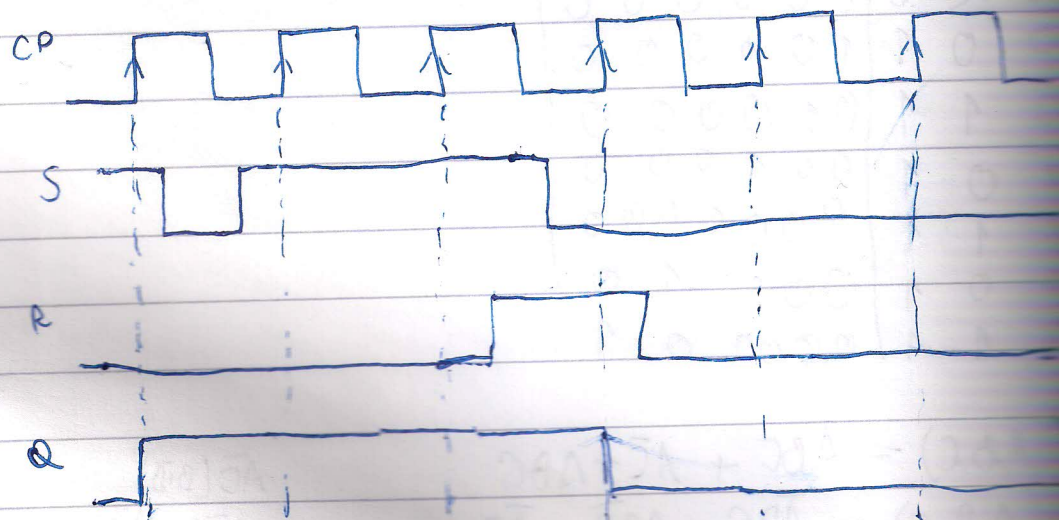
↑ jostan za bilic

1.

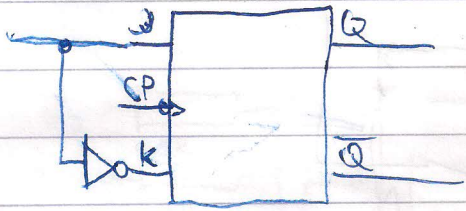


CP	S	R	Q	$\bar{Q}$
x	x	x	x	x
↑	0	0	0	1
↑	1	0	1	0
↑	0	1	0	1
↑	1	1	x	x

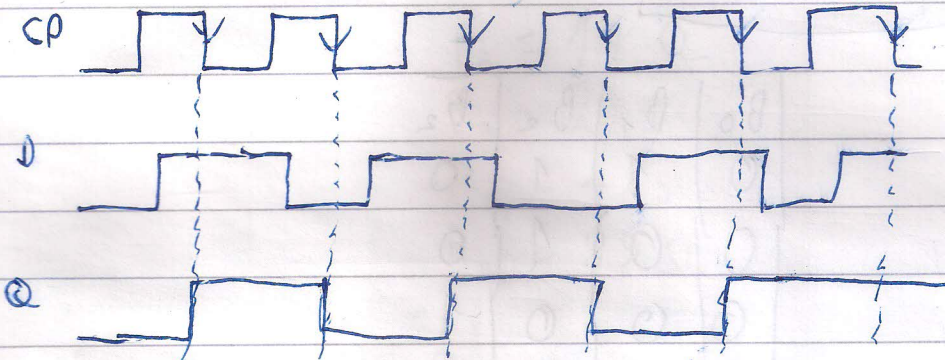
SR	$Q_{n+1}$	$Q_n$
00	0	$Q_n$
01	0	$Q_n$
10	1	$Q_n$
11	x	x



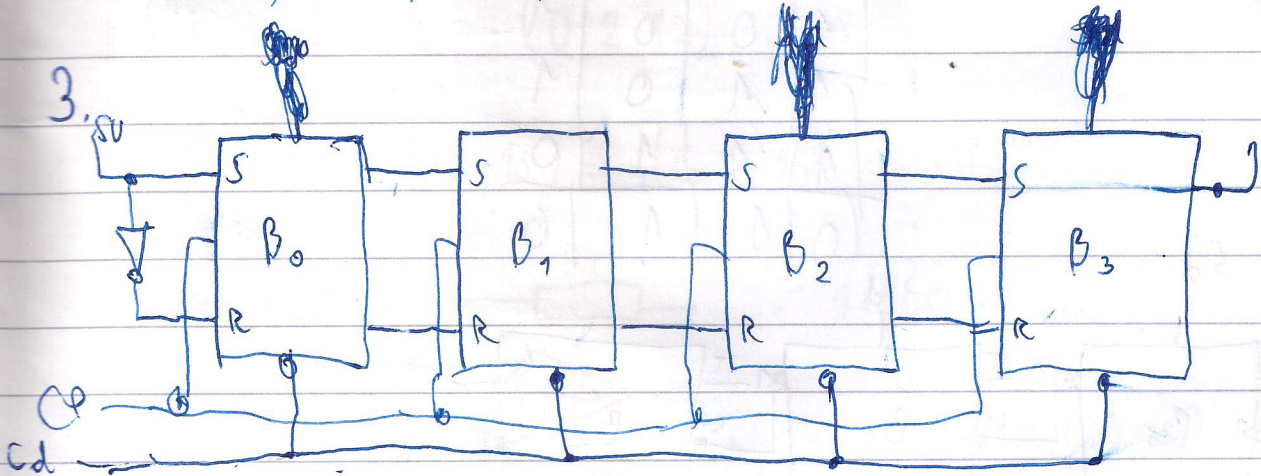
2.



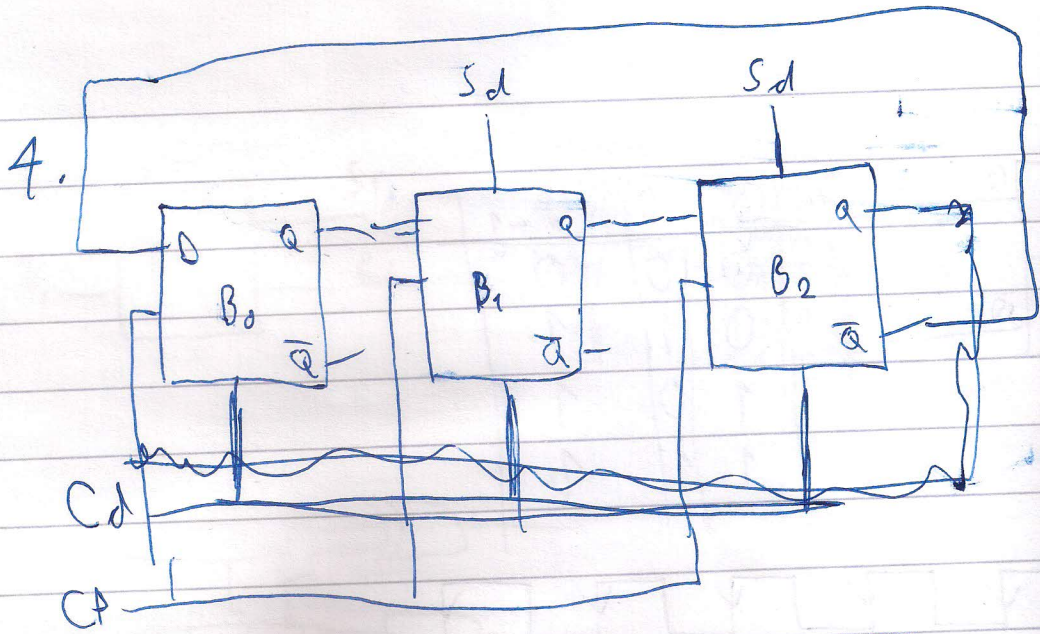
$Q_n$	D	$Q_{n+1}$
0	0	0
0	1	1
1	0	1
1	1	1



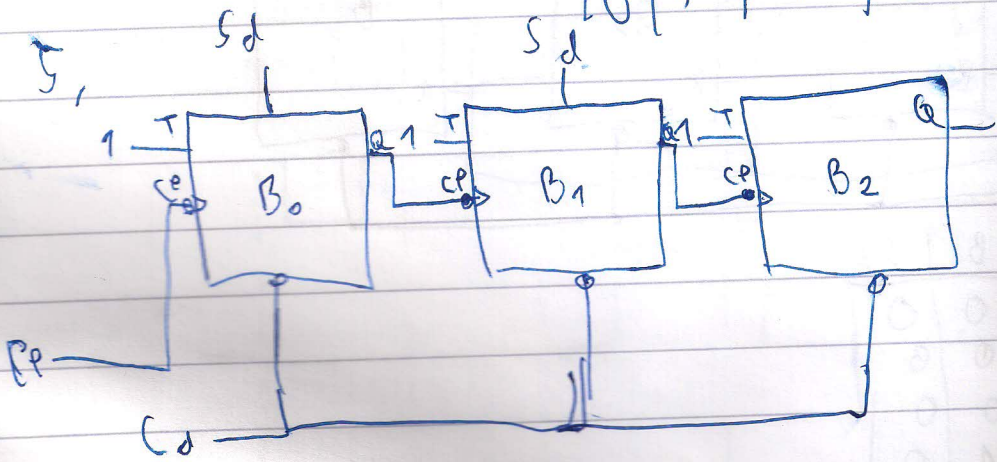
3.



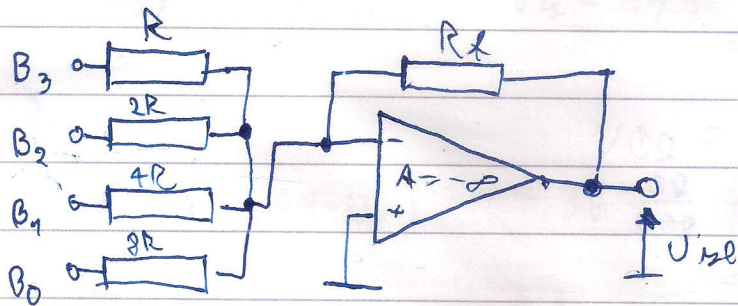
$C_d$	S0	B0	B1	B2	B3
0	X	0	0	0	0
1	1	1	0	0	0
0	0	0	1	0	0
1	1	1	0	1	0
X	1	1	1	0	1



$B_0$	$B_1$	$B_2$	$\overline{B_2}$
0	1	1	0
0	0	1	0
0	0	0	1
1	0	0	1
1	1	0	1
1	1	1	0
0	1	1	0



$C_d$	$B_0$	$B_1$	$B_2$	$B_2$
0	0	0	0	0
1	1	1	0	1
1	1	1	1	1
1	1	1	1	0
0	1	1	1	0



$$R_{B_3} = 1 \text{ k}\Omega$$

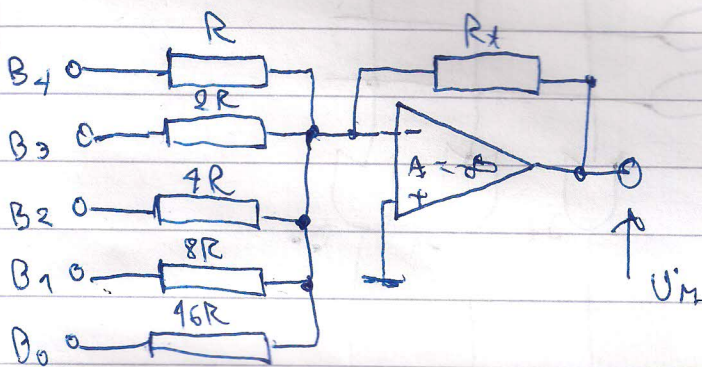
$$R_{B_2} = 2 \text{ k}\Omega$$

$$R_{B_1} = 4 \text{ k}\Omega$$

$$R_{B_0} = 8 \text{ k}\Omega$$

$$U_{iz} = -(U_n \cdot B) = -(0.2 \cdot 12) = -2.4 \text{ V}$$

$$U_{mod} = -(U_n \cdot 15) = -(0.2 \cdot 15) = -3 \text{ V}$$



$$\frac{163421}{19900} = 28_{CAD}$$

$$U_n = 0,1 \text{ V}$$

$$U_{iz} = -(0,1 \cdot 28) = -2,8 \text{ V}$$

$$U_{mod} = -(0,1 \cdot 39) = -3,9 \text{ V}$$

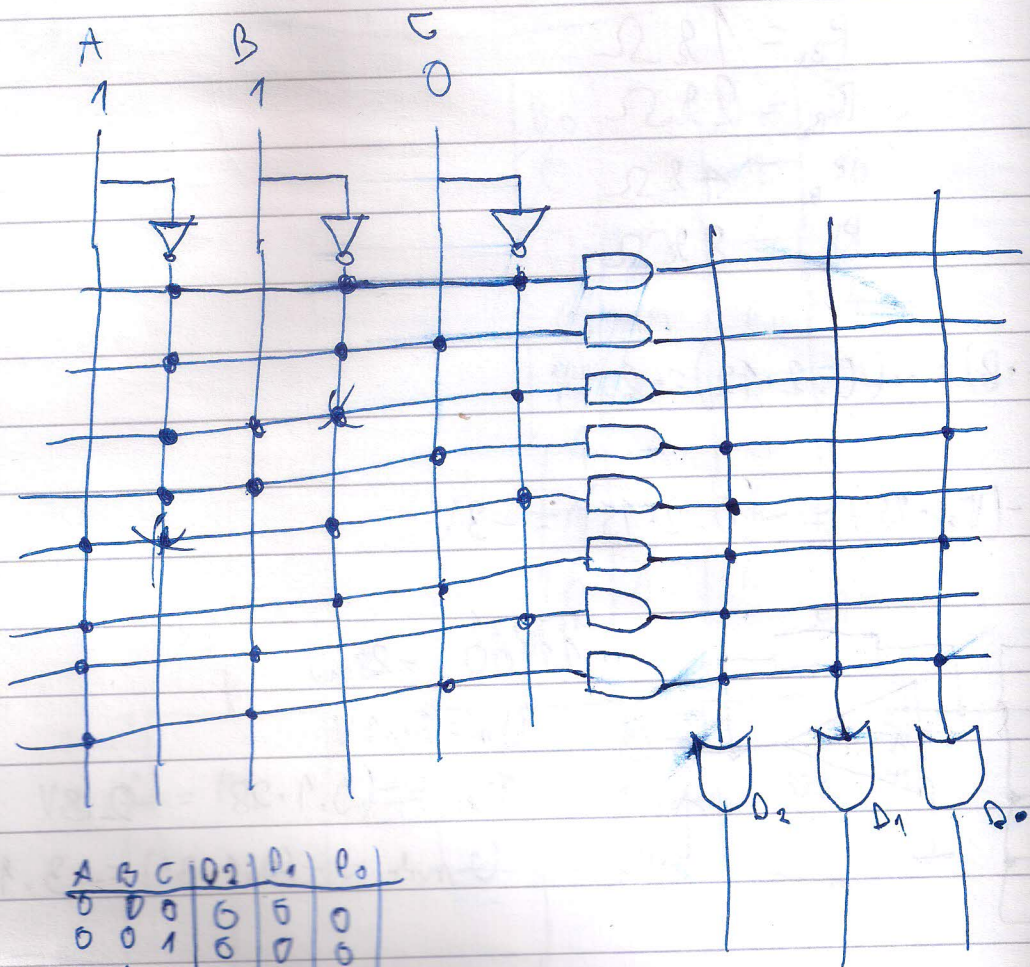
$192 \times 64 \times 2 \times 16 \times 2.1$   
 $11001010$   
 $192$

$= 202$

$202 \cdot 0.1 = 20V$

$N_r = \frac{20}{202}$

$N_r =$



A	B	C	$D_2$	$D_1$	$D_0$
0	0	0	0	0	0
0	0	1	0	0	0
0	1	0	0	0	1
0	1	1	1	0	1
1	0	0	1	0	0
1	0	1	1	0	1
1	1	0	1	0	0
1	1	1	1	1	1

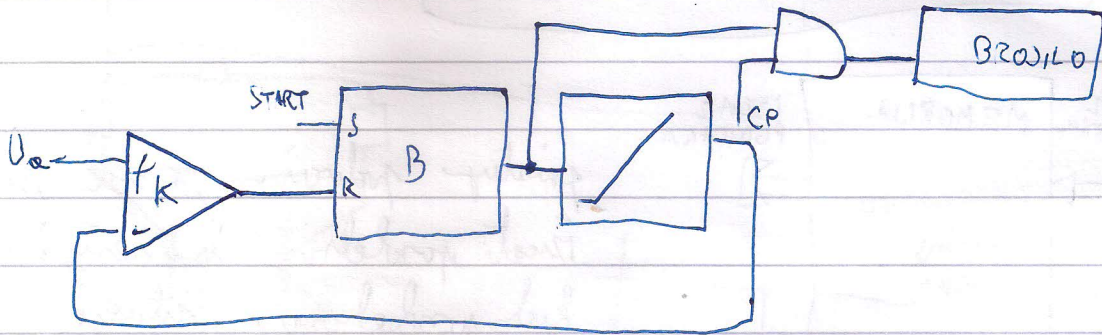
$$\begin{array}{r} 2162 + 21 \\ 101011 \end{array} = 43_{(10)}$$

$$V_{z1} = -4.3V$$

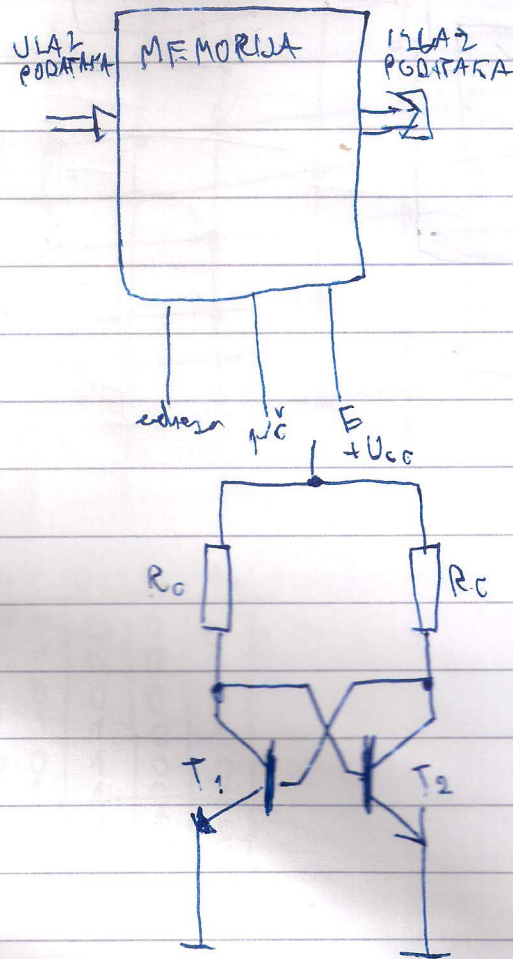
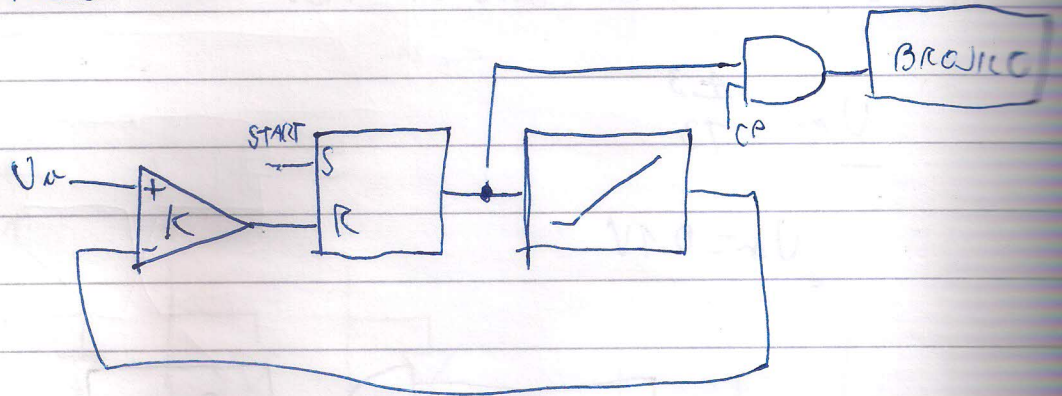
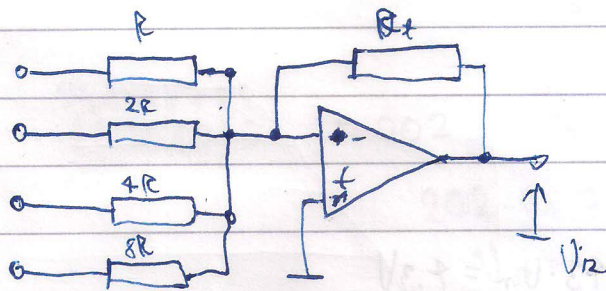
$$-(43 \cdot U_m) = -4.3V \quad 43 \cdot U_m = 4.3V$$

$$U_m = \frac{4.3}{43}$$

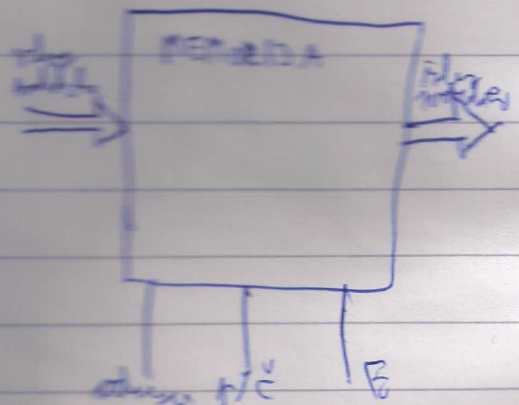
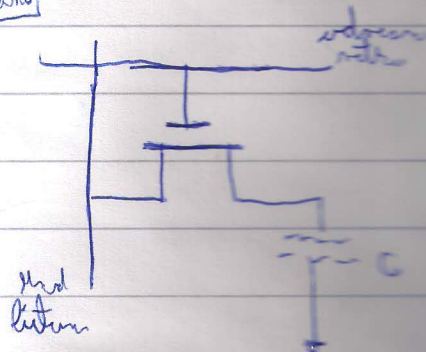
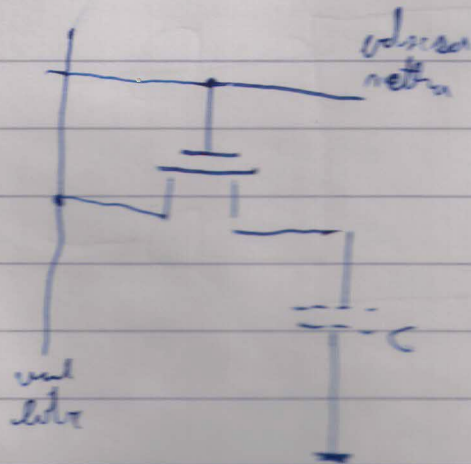
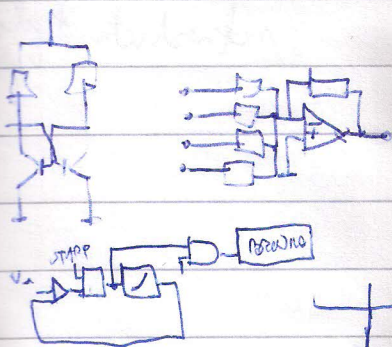
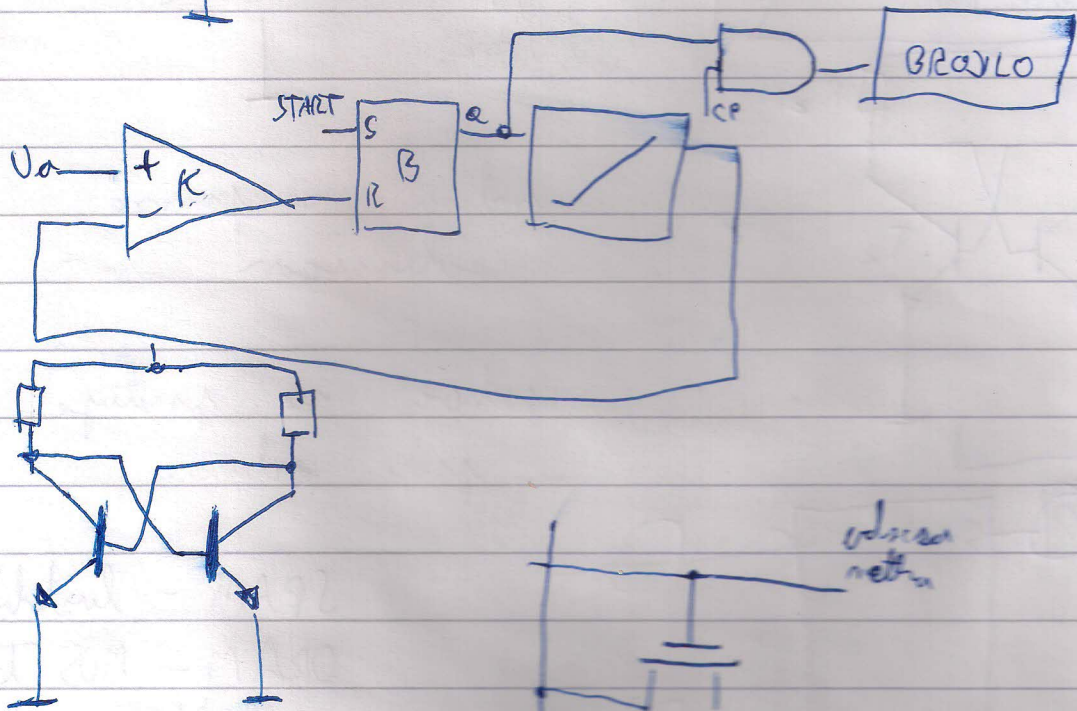
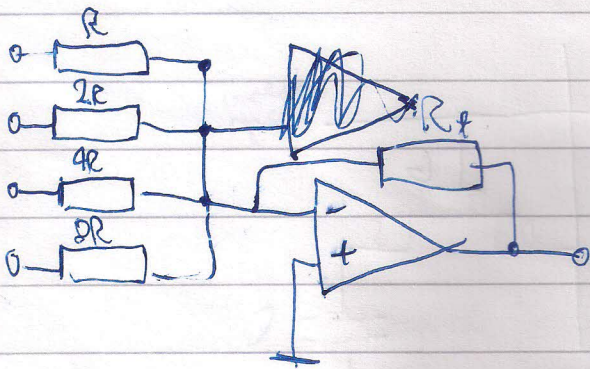
$$U_m = 0.1V$$

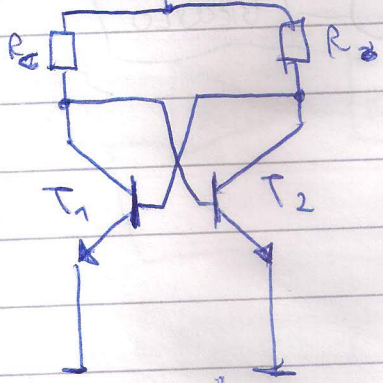
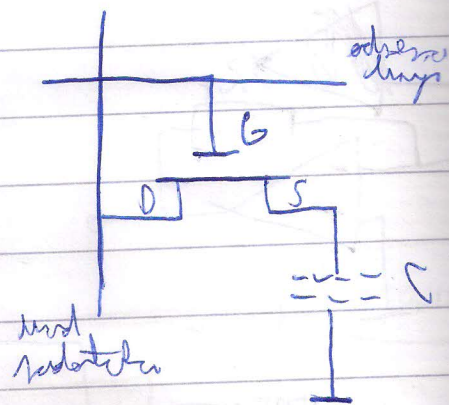
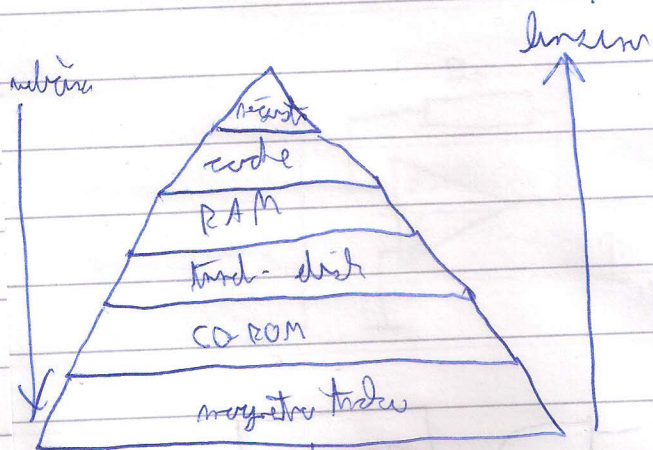






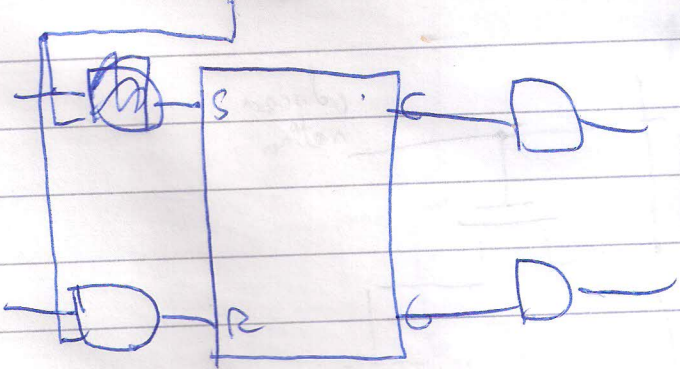
pristup podacima  
 izlazi podataka ili  
 kad podataka, što  
 i pranje podataka  
 dugotrajno i instancijom  
 kad svijetlog  
 od pre adrese i  
 vodnje pristupljenja





podvojné tranzistorové schéma

podvojné zapojenie pre adresy



SRAM - last  
 DRAM - MO  
 ↓  
 row  
 col