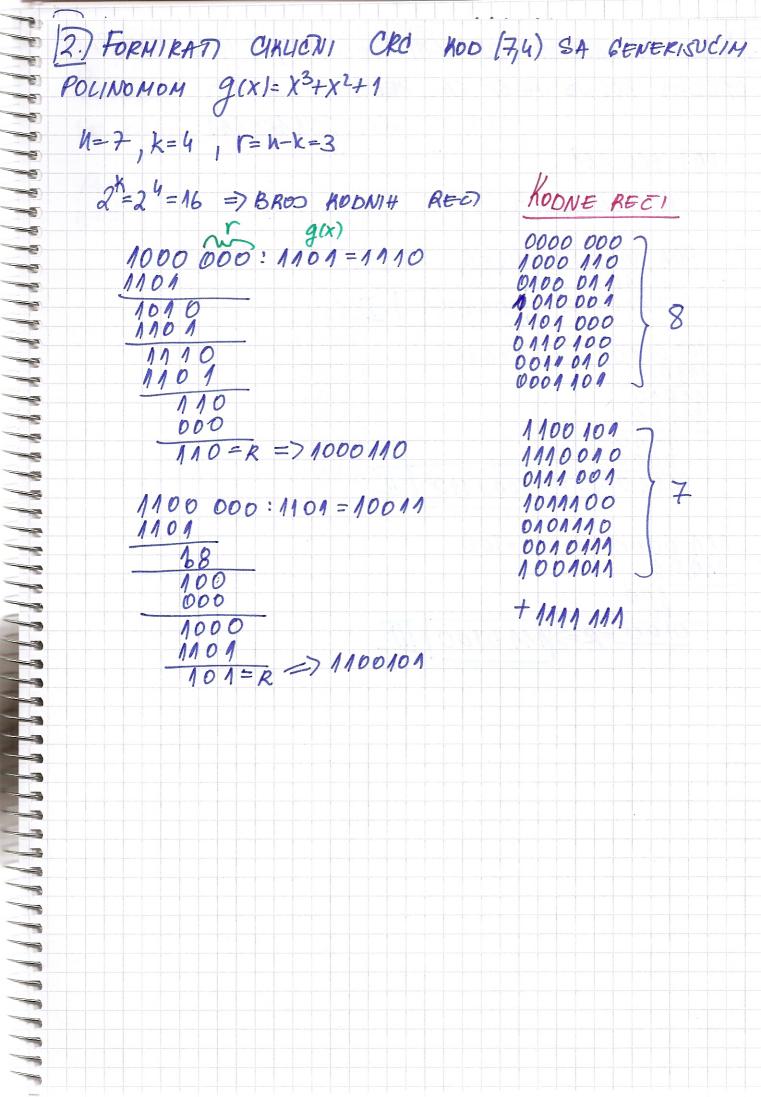
CIKLIENO KODOVANJE C(n,k) $(C_0, C_1, \ldots, C_{n-1}) \in C \cong (C_{n-1}, C_0, C_1, \ldots, C_{n-2}) \in C$  $C(x) = C_0 + C_0 X + C_2 X^2 + \dots + C_{n-1} X^{n-1}$ \* DUZINA KODNE RECT JE h DELI SE PO MODULU / X - 1  $X \cdot C(x) = C_0 X + C_1 X^2 + \dots + C_{u-1} X^u$  $X \cdot C(x) = (x^{u} - 1) C_{u} - 1 + C_{u-1} + C_{0} \times + \dots + C_{u-2} \times \frac{u-1}{2}$ C(x) $X \cdot C(x) = \overline{C}(x) = (x^{n} - 1)C_{n-1}$  $X \cdot C(x) = \overline{C(x)} \mod (x^{u} - 1)$ GI-GENERISUC'A MATRICA PRIKAZUJE SVE HODNE AECT g(x) - GENERISUCI POLINOM gar) EC xgex) ec, x'gex) ec, ..., x'gex) ec  $U_{0}g(x) + u_{0}\chi^{2}g(x) + cu_{2}\chi^{2}g(x) + \dots + u_{n-T-1}\chi^{n-T-1}g(x) \in C$  $g(x) \left[ u_0 + u_1 x + u_2 x^2 + \dots + u_{n-r-1} x^{n-r-1} \right] \in C$ 

[1.] FORMIRATI CRC KOD (7,3) SA GENERISUCIN POLINOMOM 9 (x) = x 4 x 3 + x 2 + 1 \* CIKLIENI KOD X1 X2 X3 X1 X3 X2 PODSKUP (BLOK KODONA) X2 X9 X3 112130000 (=>1123×4 0010000 0010000 11101 ONNON X4 X3 X2 X 1 INFO ZASTITA 0 0011101 (001/101) 0111010 1110100  $(\hat{i}_1 X^2 + \hat{i}_2 X + \hat{i}_3) X^4$ 1101001 1010011  $\chi^{4}: (\chi^{4}+\chi^{3}+\chi^{2}+1) = 1$ 0100111 -X + X 5+ X2+ 1 +X3+X2+ 1 1001110 5 + 0000000 1101 6 VHOLIKO JE PRISTIGLA REC: 1) 1010011 2) 1110011; PROVERIT DA 4 JE BILD GRESKE & TOKU PRENOSA. \* AKO JE OSTATAK 1) 101 0011 : 11101 = 111 JEDNAK "O" NEMA 11101 GREGKE 4 10 0/1 -11101 -11101 D=R => NEMA GRESKE -2) 1110011: 11101 -100 -----11101 -11 -00 NNN AMER = DOSLO JE DO BRESKE U PRENDOU



3. NEKA SE KORISTI CIKLICNI KOD (7,3) g(x)=x<sup>4</sup>x<sup>3</sup>x<sup>2</sup>+1 ODREDITI KODNE RED 2A SERVENCU BITA

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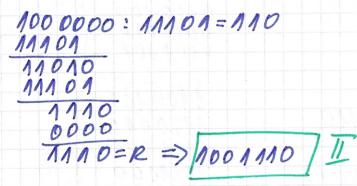
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001 100 111

N=7, k=3, r=4

 $\frac{001\ 0000:11101=1}{1\ 100} = 1$   $\frac{1\ 100}{1\ 100} = R \Rightarrow 0011001 \text{ I}$ 



[4.] NEKA SU PRIMLJENE RECT 1110100 1010111 PROVERIN DA U JE BILO GRESKE PRI PRENOSU AKO SE KORISTIO CRC g(x)=x4+x3+x2+1 1=4 N=7 g=3k=3 1110 100:11101=100 <u>11101</u> 0 = R NEMA GRESKE 1010111 : 11101=111 11101 10001 11101 11001 11101 00100 = R DOSLO DE DO BRESLE 70