

Rešenje prvog kolokvijuma održanog 13.11.2016.

1.

Sistem sa osnovom 3	Sistem sa osnovom 9	Dekadni sistem	Heksadekadni sistem
12110110.01	5413.1	3981,111...	F8D, 1C7

Binarni sistem	Oktalni sistem	Sistem sa osnovom 7
11100111010011	34723	61105

2.

$$11101000110 : 100110 = 110001$$

$$1110110 - 110001 = 1000101$$

$$1000101 + 10010110000 = \mathbf{10011110101}$$

3.

Dekadni sistem	ZA, binarni sistem, n=8	PK, binarni sistem, n=9
-130	/	101111110
-66	11000010	110111110

4.

Jendan način:

$$10011100-00000101 = 10011100 + 11111011 = (10010111)_{2,PK} = \mathbf{(-01101001)_2} = \mathbf{(-105)_{10}}$$

5.

$$A = -7998 = (92002)_{10,PK}$$

$$B = +1668 = (01668)_{10,PK}$$

$$A: \quad 1001 \quad 0010 \quad 0000 \quad 0000 \quad 0010$$

$$B: \quad 0000 \quad 0001 \quad 0110 \quad 0110 \quad 1000$$

$$P' \quad \quad 0 \quad \quad 0 \quad \quad 0 \quad \quad 0 \quad \quad 0$$

$$C' \quad 1001 \quad 0011 \quad 0110 \quad 0110 \quad 1010$$

$$P' \quad \quad 0 \quad \quad 0 \quad \quad 0 \quad \quad 1 \quad \quad 0$$

$$K \quad 0000 \quad 0000 \quad 0000 \quad 0000 \quad 0110$$

$$C \quad 1001 \quad 0011 \quad 0110 \quad 0111 \quad 0000 \quad = (93670)_{10,PK} = -6330$$

6.

$$A = -987 = -0987 = (99013)_{10,PK}$$

$$B = +668 = +0668 = (00668)_{10,PK}$$

A: 1100 1100 0011 0100 0110

B: 0011 0011 1001 1001 1011

P' 0 0 0 1 0

C' 1111 1111 1100 1110 0001

K 1101 1101 1101 1101 0011

C 1100 1100 1001 1011 0100 $\rightarrow (99681)_{10,PK} = -319$