

$$29 + 21 \quad -29 - 21$$

(ا)

$$\begin{array}{r} 29 \text{ binary } 0111101 \\ 21 \text{ binary } 010101 \\ \hline 110010 \end{array} +$$

دو رقم نقلی آخر یکسان نشد
پس overflow داریم

+1

$$\begin{array}{l} -29 \rightarrow -A = \bar{A} + 1 \rightarrow 100010 + 1 = 100011 \quad (2^2 \text{ complement}) \\ -21 \rightarrow -B = \bar{B} + 1 \rightarrow 101010 + 1 = 101011 \quad (2^2 \text{ complement}) \end{array}$$

+2

$$\begin{array}{r} -29 - 21 \rightarrow \\ \begin{array}{r} 100011 \\ 101011 \\ \hline 1001110 \end{array} +$$

دو رقم نقلی آخر یکسان هستند
overflow نداریم

+4

-1

$$(11001001)_{\text{gray}} \rightarrow (10001110)_{\text{binary}}$$

-2 because there is no solution

(ب)

$$(11001001)_{\text{binary}} \rightarrow (10101101)_{\text{gray}}$$

-2 because there is no solution

(ج)

1	1	1	0	1	0	0	0	1	0	0	1
P_1	P_2	d_3	P_4	d_5	d_6	d_7	P_8	d_9	d_{10}	d_{11}	d_{12}

+8

$$\text{کد صند: } 111010001001$$

(د)

$$(473406.12234)_8 \rightarrow (27706.2938)_{16}$$

$$(10011101110000110.001010010011100)_2$$

+7

$$27706.2938$$

Subject :

Date

0	1	1	1	1	0	0	0	1	0	0	1
p_1	p_2	d_3	p_4	d_5	d_6	d_7	p_8	d_9	d_{10}	d_{11}	d_{12}

bit موجود در d_3 اشتباه است $\rightarrow 1+2=3$

-8

داده اصلی : 01001001

place of change : 5