

Tuntitehtävä 13.9

2023년 9월 13일 수요일 오후 3:07

0.

hex	bin
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001
A	1010
B	1011
C	1100
D	1101
E	1110
F	1111

1. $\overset{\text{hex}}{7E} \xrightarrow{\text{bin}} 0111\ 1110_2$

2. $\overset{\text{bin}}{1000\ 0001} \xrightarrow{\text{hex}} 81_{16}$

4. $\overset{\text{hex}}{07FFE0} \xrightarrow{\text{bin}} 0000\ 0111\ 1111\ 1111\ 1110\ 0000_{16}$

5. $\overset{\text{bin}}{00000111000011111110} \xrightarrow{\text{hex}} 70FE_{16}$

7. $\overset{\text{10-kanta}}{b) \begin{array}{l} 12,5 \times 10^9 \text{ MB} \\ 28 \times 10^3 \text{ MB} \\ 12,5 \times 10^3 \text{ MB} \\ 1,3 \text{ MB} \\ 0,13 \text{ MB} \end{array}}$

8. a) $\begin{array}{l} 12,5 \times 10^{15} \text{ B} \\ 28 \times 10^9 \text{ B} \\ 12,5 \times 10^9 \text{ B} \\ 1,3 \times 10^6 \text{ B} \\ 0,13 \times 10^6 \text{ B} \end{array}$

a) $\begin{array}{l} \frac{12,5 \cdot 10^{15} \text{ B}}{2^{20} \text{ B/MB}} = 1,1920929 \times 10^{10} \text{ MB} \\ \frac{28 \cdot 10^9 \text{ B}}{2^{20} \text{ B/MB}} = 26702,88086 \text{ MB} \\ \frac{12,5 \cdot 10^9 \text{ B}}{2^{20} \text{ B/MB}} = 11920,92896 \text{ MB} \\ \frac{1,3 \cdot 10^6 \text{ B}}{2^{20} \text{ B/MB}} = 1,239776611 \text{ MB} \\ \frac{0,13 \cdot 10^6 \text{ B}}{2^{20} \text{ B/MB}} = 0,1239776611 \text{ MB} \end{array}$

b) $\begin{array}{l} 12,5 \times 10^6 \text{ GB} \\ 28 \text{ GB} \\ 12,5 \text{ GB} \\ 0,0013 \text{ GB} \\ 0,00013 \text{ GB} \end{array}$

$$\begin{array}{l} 1\text{KB} = 2^{10} \text{ B} \\ 1\text{MB} = 2^{20} \text{ B} \\ 1\text{GB} = 2^{30} \text{ B} \end{array}$$