

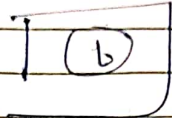
Date 26.05.2021

Day MTWTFS

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R.NO :- 20P-0101.

DIGITAL LOGIC DESIGN



$$(93)_{16} + (DE)_{16} = (?)_{16}$$

$$\begin{array}{r} (93)_{16} \\ + (DE)_{16} \end{array}$$

$$\text{Right column} = 3_{16} + E_{16} = 3 + 14 = 17$$

$$= 17 - 16 = 1$$

$$\begin{array}{l} \text{Left column} = 9 + D + 1 = 9 + 13 \\ = 23 \end{array}$$

$$= 23 - 16$$

$$= 7 \text{ with } 1$$

carry

171

Q

~~2x~~ The number entered is  $165.535_{10}$  in decimal number system

- We want to convert it into hexadecimal.

→ Converting  $165.535_{10}$  in hexadecimal

→ Whole part of no is obtained by dividing on the basis new.



Date \_\_\_\_\_

$$\begin{array}{r|l} 165 & 16 \\ -160 & 10 \\ \hline & 5 \end{array}$$

Happened  $165_{10} = 10.5_{16}$

→ Fractional part is obtained by multiply on the basic hex,

	535
	16
	<hr/>
8	96
	16
	<hr/>
15=F	36
	16
	<hr/>
5	76
	16
	<hr/>
12=C	16
	16
	<hr/>
2	56
	16
	<hr/>
8	96
	16
	<hr/>
15=F	36
	16
	<hr/>
5	76
	16
	<hr/>
12=C	16003
	16
	<hr/>
<del>15=F</del> 2	51055
	16
	<hr/>

Happened  $0.535_{10} = 0.88F5C28F5C2_{16}$

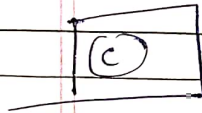
Add up together whole and fractional part here so.

$$A5_{16} + 0.88F5C28F5C2_{16} = A5.88F5C28F5C2_{16}$$

Result of converting:

$$165535_{10} = A5.88F5C28F5C2_{16}$$

~~Part C~~



68

$$\begin{array}{r} 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 1 \quad 0 \quad 0 \quad 0 \quad 1 \quad 0 \quad 0 \end{array}$$

27

$$\begin{array}{r} 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \\ 0 \quad 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \end{array}$$

68

$$\begin{array}{r} 0 \quad 1 \quad 0 \quad 0 \quad 0 \quad 1 \quad 0 \quad 0 \\ 0 \quad 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 1 \end{array}$$

We will now add this,

$$\begin{array}{r} 0 \quad 1 \quad 0 \quad 0 \quad 0 \quad 1 \quad 0 \quad 0 \\ 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 1 \quad 1 \\ \hline 0 \quad 1 \quad 0 \quad 1 \quad 1 \quad 1 \quad 1 \quad 1 \\ 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \quad 1 \end{array}$$

$$95 = 0 \quad 1 \quad 0 \quad 1 \quad 1 \quad 1 \quad 1 \quad 1$$

8F5C2<sub>16</sub>

$$68 - (-27) = 95$$