Lab NASA Format
Khadiza Akter
ese-17 A

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1) convent the numbers 37.25 and 0.2 into NASA Format

⊞ $37.25_{10} \rightarrow \underline{25.4}_{16}$ $25.4_{16} \rightarrow 00100101.0100_2$

16|37
16|2 h5↑ $0.25_{10} \times 16 = 4.0$ $\rightarrow \underline{100101.0100}_2$
  |0 h2↑

* Key Binary Nara float $\rightarrow 0.100101 0100 \times 2^6$

$\underbrace{0100}_{4} \underbrace{1010}_{A} , \underbrace{1000}_{8} \underbrace{0000}_{0} | ---\overset{0}{-}--- | \underbrace{0000}_{0} \underbrace{0110}_{6}$

⊞ $0.2_{10} \rightarrow 0.2 \times 16 = 3.2 | \overline{3}$ $0.3_{16} \rightarrow 0.\underline{0011}_2$
                    $0.2 \times 16 = 3.2 | \overline{3}$

$\rightarrow 0.\underline{3}_{16}$

* Key Binary Nara float $\rightarrow 0.\underline{0011} \times 2^0$

$\underbrace{0001}_{1} \underbrace{1001}_{9} | \underbrace{1001}_{9} \underbrace{1001}_{9} | \underbrace{1001}_{9} \underbrace{1001}_{9} | \underbrace{0000}_{0} \underbrace{0000}_{0}$

* Final result :

Base 10	NASA Format
37.25	4A 80 00 06
0.2	19 99 99 00