

## QUESTION - 5 / BINARY PALINDROME

Let the two numbers to be converted from decimal to binary be:

45 and 51

45  $\rightarrow$  binary

$$\begin{array}{r|l} 2 & 45 \\ \hline 2 & 22 \\ \hline 2 & 11 \\ \hline 2 & 5 \\ \hline 2 & 2 \\ \hline 2 & 1 \end{array}$$

$$45_{10} = (101101)_2$$

101101 is a palindrome

51  $\rightarrow$  binary

$$\begin{array}{r|l} 2 & 51 \\ \hline 2 & 25 \\ \hline 2 & 12 \\ \hline 2 & 6 \\ \hline 2 & 3 \\ \hline & 1 \end{array}$$

$$51_{10} = (110011)_2$$

110011 is a palindrome