Tutorial/Practical-2

MIN-103: Programming and Data Structures

Problems to be done in copy

1. Convert the following integers in 8 bit binary number: 59 64
2. Convert the negative integer -54 in 8 bit binary number using signed/unsigned notation and twos complement notation.
3. Determine the ASCII value of A, a, 3, %, - , @, (, }.
4. Convert the real number 4.5 into IEEE single precision and IEEE double precision floating point number.
5. Determine the real number represented by the following single precision floating number.

1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0

All the above problems must be done in lab note book in advance in your hostel.

Problems for programming

Write flowchart/pseudo code for all the problems

1. Write a code for conversion of an eight bit binary number into decimal in signed/unsigned integer notation.

2. Define variables of int, float, double, long int, long long double etc. type. Print the size and limits of the variables.

3. Declare a char type variable and take a lower case alphabet as input from user. Display its ASCII value and convert the alphabet to upper case by manipulating the ASCII value.

4. Given three corner points of a triangle, and one more point P. Write a code to check whether P lies within the triangle or not.