## **Assignment-11(Recursion)**

- 1> Write a Python program to calculate the sum of a list of numbers.
- 2> Write a Python program to converting an Integer to a string in any base.
- 3> Write a Python program of recursion list sum.

Test Data: [1, 2, [3,4], [5,6]]

Expected Result: 21

- 4> Write a Python program to get the factorial of a non-negative integer.
- 5> Write a Python program to solve the Fibonacci sequence using recursion.
- 6> Write a Python program to get the sum of a non-negative integer.

Test Data:

sumDigits(345) -> 12

 $sumDigits(45) \rightarrow 9$ 

7> Write a Python program to calculate the sum of the positive integers of n+(n-2)+(n-4)... (until n-x=<0).

Test Data:

sum\_series(6) -> 12

sum series(10) -> 30

8> Write a Python program to calculate the value of 'a' to the power 'b'.

Test Data :

(power(3,4) -> 81

9> Write a Python program to find the greatest common divisor (gcd) of two integers.