

**Department of Computer science and Technology,  
Indian Institute of Engineering, Science and Technology, Shibpur,  
Introduction To Computing Lab**

**Assignment - 5**

1. Write suitable function and corresponding program to test them for the following:
  - (a) Compute  $X^n$ , where  $X$  is any valid number and  $n$  is an integer value.
  - (b) Swap values of two integer variables.
  - (c) Compute the GCD of two integers and return the result to the calling function.
  - (d) Compute and returns the sum of  $n$  elements of an integer array.
  - (e) Remove white spaces (blank spaces) from a string.
2. Write a C function *reverse(s)* to reverse the string  $s$ . Where  $s$  is an argument in the function *reverse(s)*.
3. Write a C function *subs(s1, s2)* which returns 1 if  $s2$  is a substring of  $s1$  otherwise 0
4. Write a C function that takes input a two dimensional array of integers and find the largest integer among them and return it to calling function.
5. Write a C function that takes input a two dimensional array of integers and find the largest number from each row and column individually, store it in two corresponding one dimensional array respectively and display it. Write the complete program to test the function.
6. Write a C function “int reverseInteger(int n)”, that returns the reverse of  $n$ , that is, the returned integer (in decimal) contains the same decimal digits as  $n$ , but in reverse order. Write a complete C program to demonstrate that the function you have written works as desired.