CO 10507: Programming for Problem Solving
Section all (Sem B)
Lab Assignment 02
Max. Marks: 10

1. Late submission and copying is not allowed. If found then students involved in copying will fail in this course.
2. Draw Flowchart and Write Algorithms for every Program.

S.no	Questions	CO
1	Write a program to find the sum of all natural numbers between 1 to n.	CO2, CO3
2	Write a program to count the number of digits in any number and swap first and last digits of number.	CO2, CO3
3	Write a C program to convert a decimal number into its equivalent binary and octal representation	CO2, CO3
4	Write a program to print all proper divisors of a number provided by the user	CO2, CO3
5	Write a program to print all Strong numbers between 1 to n.	CO2, CO3
6	Write a program to find the frequency of each digit in a given integer.	CO2, CO3
7	Write a program to check whether a number is an Armstrong number or not.	CO2, CO3
8	Write a program to print the sum of the following series using loops: $1+1/2+1/3\ldots\ldots+1/n$	CO2, CO3
9	Write a function in C to print following pattern Note: Only number of columns will be the input parameter to the Function	CO2, CO3

Mirrored Parallelogram
```
*******
  *******
    *******
      *******
```

Mirrored half diamond
```
      *
     **
    ***
   ****
  *****
   ****
    ***
     **
      *
```

10	Write a function in C to print following pattern	CO2, CO3
	Note: Odd number of rows and columns shall be the input parameters to the function. If the number of rows or columns is even then print an error and return false otherwise print the pattern and return true.	
	11011 11011 00000 11011 11011	