
Course Instructor: **Md. Asif Khan Rifat**
Course: **CSE103 (Structured Programming)**

Lab: **03**

Topics Today

1. While loop
2. For loop

Problem 1

Write a C program to print “Hello World” 10 times. On each iteration “Hello World” should be displayed on new line.

Problem 2

Write a C program to print numbers from 1 to n. n will be user input.

Problem 3

Write a C program to Program to add numbers until the user enters zero.

Problem 4

Write a program to print odd numbers between 1 and 50 in reverse order.

Problem 5

Write a C program to print the sum of all digits of a given number, N. N will be the user input.

Sample Input	Sample Output
1234	10
678	21

Problem 6

Write a C program to calculate the factorial of a given number. The formula of a factorial is as follows:

$$n! = 1 \times 2 \times 3 \times \dots \times n$$

Sample Input: 5

Sample Output: Factorial of 5 is: 120

Problem 7

User will input a number, and you have to generate the multiplication table of that number.

Input	Output
3	3 x 0 = 0
	3 x 1 = 3
	3 x 2 = 6
	3 x 3 = 9
	3 x 4 = 12
	3 x 5 = 15
	3 x 6 = 18
	3 x 7 = 21
	3 x 8 = 24
	3 x 9 = 27
	3 x 10 = 30

Problem 8

Write a C program to calculate x^y where x is base (an integer) and y is exponent (an integer) as follows. The program should have a while repetition statement.

Sample Input	Sample Output
Enter base: 2 Enter exponent: 3	8.00
Enter base: 2 Enter exponent: -1	0.50
Enter base: 5 Enter exponent: 0	1.00