

National University of Computer and Emerging Sciences



**Lab Manual**  
*for*  
**Programming Fundamentals**

Course Instructor	Ms. Amina Batool
Lab Instructor(s)	Ms. Mamoona Akbar Ms. Sonia Anum
Section	PF C
Semester	Fall 2021

Department of Computer Science  
FAST-NU, Lahore, Pakistan

## **Lab Manual 04**

### **Objectives**

In this lab we will mainly perform activity

While loop

#### **Problem 1:**

Write a program that display five times your name using while loop

#### **Problem 2:**

Write a program that terminate when the user entered -1 using while loop

#### **Problem 3:**

Write a program that input a number from user and display table of that number in descending order using while loop.

#### **Problem 4:**

Write a program that takes starting and ending number from user and finds factorial of that number using while loop.

#### **Output:**

Enter starting number: 2  
Enter ending number: 5

Number	Factorial
2	2
3	6
4	24
5	120

#### **Problem 5:**

Write a program that display the sum of the following series using while loop.  
 $1 + 1/2 + 1/4 + 1/6 + 1/8 + \dots + 1/100$

#### **Output:**

Sum is 3.249602

**Problem 6:**

Write a program to display a table of equivalent temperature in Fahrenheit and Celsius from 150F TO 200F with an increment 7 by using while loop.

**Formula:**

$$C = 5/9 * (f-32)$$

**Output:**

Fahrenheit	Celsius
150	65.556
157	69.444
164	73.333
.	
.	
.	
.	
199	92.778

**Problem 7:**

Write a program that displays the following using while loop.

**Output:**

1				
2	2			
3	3	3		
4	4	4	4	
5	5	5	5	5