



The Superior University Lahore

Gold Campus

Faculty of Computer Science and Information Technology

LOOPS – TASKS – Programing Fundamentals

Course Title	Programming Fundamentals	Course Code		Time	
Program Name	BSIT	Semester	1 st	Section	A
Date	23 Jan 2023	Student Roll numb		Marks	
QCH Sign		Teacher Name	Ms. Sanya Abdullah		

Course Learning Outcomes (CLO)	At the end of this course students will be able to demonstrate;				
	No.	Outcome	Domain	BT Level	Relation with PLO
	3.	Analyze artificial intelligence techniques for practical problem solving	Cognitive	C4	PLO 2

Question	CLO Code	Total Marks
Question 1	3	5
Question 2	3	5
Question 3	3	5
Question 4	3	5
Question 5	3	5
Question 6	3	5

LAB INSTRUCTIONS:

*This is an individual practise assignment. Everyone has to submit this assignment. No cheating is allowed. There should be no **plagiarism**. In case of any such issue you will be awarded **0**.*

Purpose:

This assignment will give you understanding of different kind of problems handling loops.

Most of the programs has been done in Theory class and Lab class, kindly do not just paste the solutions like your “assignment 2”, create logic and do discuss with me at office 26, in case of confusion.

NO INTERNET SEARCHING IS ALLOWED. JUST THINK THE LOGIC OR DISCUSS WITH ME.

Date of Submission:

1. You need to add Question – Solution – Screen shots of your code – screen shots of your output
2. Zip file name should be your: rollno_name
3. After the deadline, there will be a **10% deduction per day** for late submission and after 2 days (3 Feb 2023 till 4:00pm) it will be **zero**.

Trust yourself and do it by your own.

TASKS:

QUESTION STATEMENT 1:

Write a program that inputs a number from the user and displays the factorial of that number.

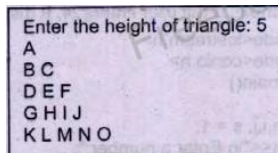
QUESTION STATEMENT 2:

Write a program that inputs the starting and ending number from the user and displays all the even numbers in the given range using while loop.

QUESTION STATEMENT 3:

Write a program that inputs the height of a triangle and displays a triangle of characters.

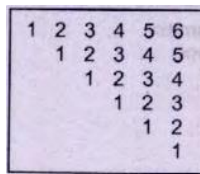
For example, if the user enters 5 then the output would be



```
Enter the height of triangle: 5
A
BC
DEF
GHIJ
KLMNO
```

QUESTION STATEMENT 4:

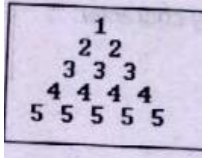
Write a program that displays the following output.



```
1 2 3 4 5 6
 1 2 3 4 5
   1 2 3 4
    1 2 3
     1 2
      1
```

QUESTION STATEMENT 5:

Write a program that displays the following output.



QUESTION STATEMENT 6:

Write a program that displays the following output.

Output:

111	112	113	121	122	123	131	132	133	211
212	213	221	222	223	231	232	233	311	312
313	321	322	323	331	332	333			

QUESTION STATEMENT 7:

Write a program that uses nested for loops to display multiplication table as follows:

(Let's challenge ourselves, even I didn't solved it yet :p)

1	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

Your code should be commentated, so that each line shows your understanding as well.

GOODLUCK 😊