CS100 Computational Problem Solving
Fall 2019-20

Section 1

Tuesday, 05 November 2019

Lab 10: Exercise

Lab Guidelines

1. Make sure you get your work graded before the lab time ends.
2. You put all your work into th folder **Lab10_YourRollNo_TAname** and submit it on LMS (Assignment>Lab10) before the time the lab ends.
3. Talking to each other is NOT permitted. If you have a question, ask the lab assistants.
4. The object is not simply to get the job done, but to get it done in the way that is asked for in the lab.
5. Phone is NOT allowed. Put it in bag or at instructor desk.
6. Any cheating case will be reported to Disciplinary Committee without any delay.

Coding Conventions:

1. Constants are ALL_CAPS.
2. Variables are all_small.
3. All curly brackets defining a block must be vertically aligned.

Learning Objective:

1. PO-02 Develop proficiency in the practice of computing.
2. CO-02 To help students analyze and solve programming problems
3. LO-02 Critical Thinking and Analysis
4. LO-03 Problem Solving
5. LO-05 Responsibility

Marks: Name: _____ Roll #: _____

Task1									Total
									25

Task2									Total
									25

Task 3									Total
									25

Task 4	Q1	Q2							Total
	15	10							25

Total Marks Obtained

/100

TA: _____

Let's Begin

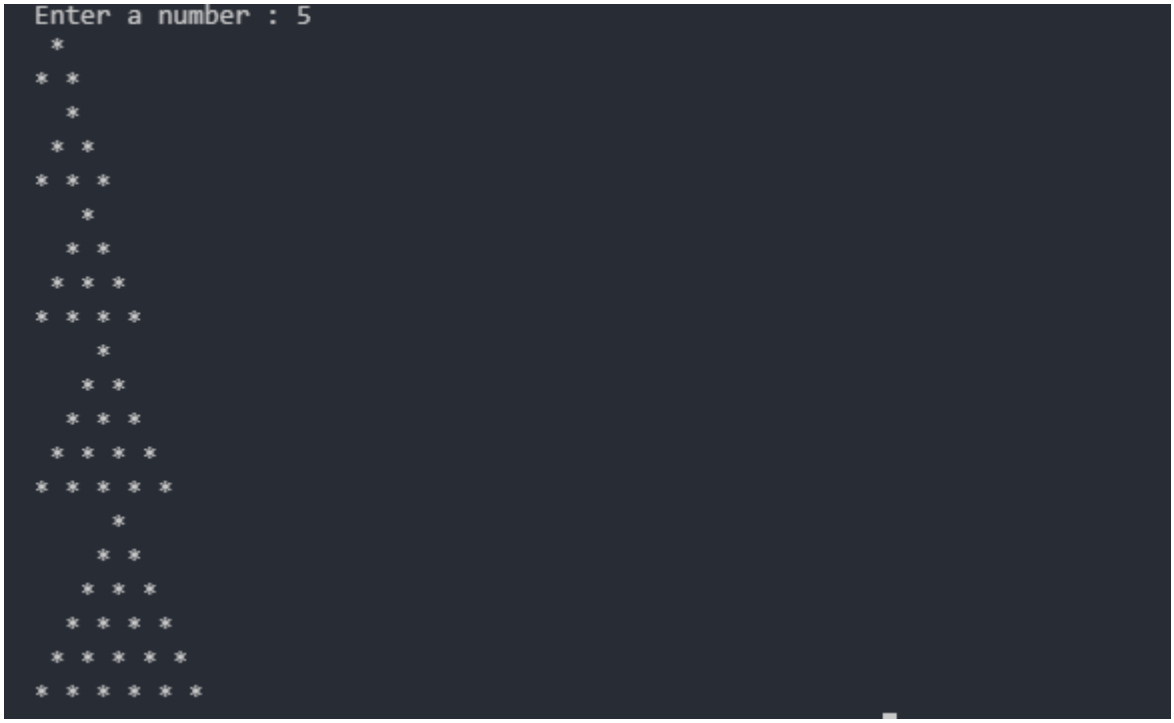
Task 1: **[25 marks]**

Write a C++ function, which takes in 3 numbers and prints them in ascending order. Test the function in main with different inputs.

Task 2: **[25 marks]**

Write a program using functional approach, which prints n number of triangles on the screen (take n as an input from the user).

The output should look like this:



Task 3: **[25 marks]**

Write a program that takes a string as an input and prints whether the string is a palindrome or not. Your program should have a functional approach.
Example: “civic”, “radar” and “madam” are palindromes but “rubber” is not.

Task 4: **[25 marks]**

Raising a number **n** to a power **p** is the same as multiplying **n** by itself **p** times. Write a function called power_func that takes two arguments, use int values for **n** and **p,** and also return the result as an integer value.
Write the main function that gets value from the user to test power function.

function format: power_func(number,power)
e.g power_func(2,3) returns 8
