



Department of Statistics & Computer Science, University of Kelaniya
ACADEMIC YEAR – 2020/2021
COSC / COST 11023 – Fundamentals of Programming
Lab Session – 06

Throughout this lab session, you will learn more about loops in C.

1. Write a C program using nested while loop to reproduce the following output:

```
1
22
333
4444
55555
```

Upload your completed program to the Lab 06 – Program 01 folder.

2. Write a C program to print out the following star pattern based on the used entered height of the triangle.

Test data and expected output:

```
Please enter the triangle height: 5
*
**
***
****
*****
```

Upload your completed program to the Lab 06 – Program 02 folder.

3. Write a C program to display the following pyramid based on the user entered height of the pyramid.

Test data and expected output:

```
Please enter the height of the pyramid: 5

      *
     ***
    *****
   *********
  ***********
 *****
```

Upload your completed program to the Lab 06 – Program 03 folder.

4. Write a C program that accepts a sequence of positive integers between 1 and 9 both inclusive from the keyboard. The program will stop accepting input once an integer outside the range is entered. The program will finish by printing the total number multiples of 3 and total number of even integers entered.

Test data and expected output (sample run 1):

```
Enter integers between 1 & 9 both inclusive, outside range to stop
Enter integer :0
Total no of even integer entered is 0
Total no of multiples of 3 entered is 0
```

Test data and expected output (sample run 1):

```
Enter integers between 1 & 9 both inclusive, outside range to stop
Enter integer :2
Enter integer :4
Enter integer :6
Enter integer :9
Enter integer :3
Enter integer :1
Enter integer :2
Enter integer :0
Total no of even integer entered is 4
Total no of multiples of 3 entered is 3
```

Upload your completed program to the Lab 06 – Program 04 folder.