## CSE 115L: Programming Language I Lab (Section: 06)

Spring 2020

Lab Week-06 (Nested Loop Tasks)

- 1. Write a program that creates (a) an inverted triangle pattern and (b) a reversed inverted triangle pattern using '\*'.
- 2. Write a program that will take a positive integer as input and will display the sum of all the digits as output. If the input is 135, then your program should display 9.

## **Home Work:**

1. Write a program that prompts the user to enter the number of rows and then it prints a diamond pattern using that input number of rows.

```
Enter number of rows (for diamond dimension): 12
      XXX
     XXXXX
    *****
    ******
   *****
   ********
  ******
 ******
 *******
******
*********
*******
 ******
  ******
  ******
   **********
    XXXXXXXXX
    *****
     XXXXX
```

2. Write a program to find the GCD (Greatest Common Divisor) of two positive integer inputs.

Sample input	Sample output
Enter two integers: 45 120	GCD: 15.

3. Write a C program that finds the reverse of a number.

Sample input	Sample output
Enter a number: 3452	Reverse: 2543

4. Write a program that prompts the user to enter the coordinates of each of the vertices of a hexagon and finds the length of each side of that hexagon.