Central University of Tamil Nadu
Department of Computer Science
Python Programming Lab

Workshpeet-1   **Deadline to complete: 03/09/2024; 12:10PM**

<u>while loop:</u>

1. Find the sum of First 'n' natural numbers
2. Print the even numbers between 'm' to 'n'
3. Print the prime numbers between 'm' to 'n'
4. Display the factorial of the given number
5. Display the factors of the given number excluding 1 and itself.
6. Check the given number is Armstrong number or not
7. Find pass-percentage of a class. A teacher is entering the marks of students. A student passes a course if the marks are at least 40 (out of 100). The teacher wants to know the percentage of students passed.

<u>for loop:</u>

8. Display the following pattern of numbers
   ```
   1
   1 2 3
   1 2 3 4
   1 2 3 4 5
   ```
9. Display the following pattern of numbers
   ```
   1
   2 2
   3 3 3
   4 4 4 4
   5 5 5 5 5
   ```
10. Display the following pattern of numbers
    ```
    5 5 5 5 5
    4 4 4 4
    3 3 3
    2 2
    1
    ```
11. Display the following pattern of *s
    ```
    *
    * *
    * * *
    * * * *
    * * * * *
    ```
12. Display the following pattern of *s(Pascal Triangle)
    ```
        *
       * *
      * * *
     * * * *
    * * * * *
    ```