- **Topic: Iterative Structure**
- 1. Write a program to Print First 10 natural numbers.
- 2. Write a program to Calculate the sum of all numbers from 1 to a given number.
- 3. Write a program to print multiplication table of a given number.
- 4. Write a program to display only those numbers from a list (numbers = [12, 75, 150, 180, 145, 525, 50]) that satisfy the following conditions:

The number must be divisible by five

If the number is greater than 150, then skip it and move to the next number If the number is greater than 500, then stop the loop

- 5. Write a program to Print list in reverse order using a loop.
- 6. Write a program to display all prime numbers within a range.
- 7. Write a program to Find the factorial of a given number.
- 8. Write a program to find the sum of the series up to n terms.
- 9. Write a Python program to guess a number between 1 and 9.

Note: User is prompted to enter a guess. If the user guesses wrong then the prompt appears again until the guess is correct, on successful guess, user will get a "Well guessed!" message, and the program will exit.

- 10. Write a Python program that accepts a word from the user and reverses it.
- 11. Write a Python program that accepts a string and calculates the number of digits and letters.

Sample Data: Python 3.2

Expected Output:

Letters 6

Digits 2.

- 12. Write a program to calculate the length of string provide input by user (without using len).
- 13. Write a Python program to print the number of vowels and consonant in your full name.
- 14. Write a Python program that generates list of values. The values must be taken from user as input.
- 15. Write a Python program to copy elements from one list to another.
- 16. Write a python program to select the maximum value from list (without using maximum function).
- 17. Write a Python program to count the number of even and odd numbers from a series of numbers. Sample numbers: numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)
- 18. Find the sum of squares of each element of the list using for loop. numbers = [3, 5, 23, 6, 5, 1, 2, 9, 8
- 19. From given list: gadgets = ["Mobile", "Laptop", 100, "Camera", 310.28, "Speakers", 27.00, "Television", 1000, "Laptop Case", "Camera Lens"]
  - a) Create separate lists of strings and numbers.
  - b) Sort the strings list in ascending order
  - c) Sort the strings list in descending order
  - d) Sort the number list from lowest to highest
  - e) Sort the number list from highest to lowest