

**Modern Education Society's
Wadia College of Engineering, Pune**

NAME OF STUDENT:	CLASS:
SEMESTER/YEAR:	ROLL NO:
DATE OF PERFORMANCE:	DATE OF SUBMISSION:
EXAMINED BY:	EXPERIMENT NO: DSL A-02

TITLE: PERFORM VARIOUS OPERATIONS ON STRING

PROBLEM STATEMENT: Write a Python program to compute following operations on String:

- a) To display word with the longest length
- b) To determines the frequency of occurrence of particular character in the string
- c) To check whether given string is palindrome or not
- d) To display index of first appearance of the substring
- e) To count the occurrences of each word in a given string
- f) To string copy

OBJECTIVES:

1. To understand concept of string.
2. To understand how to perform various operations on string.

OUTCOMES:

1. To analyze the problems to apply suitable algorithm and data structure.
2. To discriminate the usage of various data structures in approaching the problem solution.
3. To understand concept of string

PRE-REQUISITES:

1. Knowledge of python programming
2. Knowledge of string operations

APPARATUS:

1. OS: Ubuntu 18.04.2 LTS
2. Processor: Intel® Core™ i7-4790S CPU
3. Graphics: GeForce GT 610/PCIe/SSE2
4. Storage: 400 GB
5. Text Editor: gedit
6. Compiler: python3
7. Terminal

QUESTIONS:

1. What is frequency count? Why is frequency count important in the analysis of algorithm ?
2. Write an algorithm to compute the sum of the digits of the given number. Justify that your algorithm satisfies all the characteristics of an algorithm.
3. Write an algorithm to perform sparse matrix addition and state its time complexity.