

IT21L : Python Programming Lab Assignments (2023-2024)

Lab Assignment List No. 1

Note: *For all assignments, take input from user and display well formatted output on screen.*

1. Python Installation and Configuration with Windows and Linux

- a) Write steps followed during installation. If possible prepare word file along with the required screen shots captured during the installation process.

2. Programs for understanding the data types, control flow statements, blocks and loops

1. Write a program to find all the indices of a substring in the given string.
2. Write a program to find the words which ends with given character/substring in the inputted string.
3. Write a program to find the factorial of a given number.
4. Write a program to display Fibonacci sequence up to n-th term.
5. Write a program to find GCD of two numbers.
6. Write a program to print all prime numbers in an interval.
7. Write a program to find all Armstrong number(s) in an interval.
8. Write a program which swap every odd-even position character in the string. (Input: "badcfe" output: "abcdef" OR input= "1234567" output: "2143657")
9. Write a program to count the number of alphabets, digits and spaces in the given string.
10. Write a program to convert the last character of each word in the string to uppercase. (e.g. String = "Python programming is very easy to learn" output= "PythoN programminG iS verY easY tO learN")
11. Write a program to do summation of diagonal elements of a matrix.
12. Write a program to do matrix multiplication.
13. Write a program to transpose the matrix.
14. Write a menu driven program to implement Add, Delete, Append, View and Quit operation on list.
15. Write a menu driven program to show Union, Intersect, Difference, Symmetric difference operations on set.