

DEPARTMENT OF COMPUTER SCIENCE

MCA I Semester Python Lab, Assignment-2

Q.1 Write a program that reads a text from keyboard and display:

- The number of uppercase letters
- The number of lowercase letters
- The number of digits in the
- The number of whitespace characters
- The number of words in the string

Q.2 Write a program in python that accepts a string to setup a passwords. Your entered password must meet the following requirements:

- The password must be at least eight characters long.
- It must contain at least one uppercase letter.
- It must contain at least one lowercase letter.
- It must contain at least one numeric digit.

Q.3 Write a Python program to perform the following operations in tuple

- Find repeated items.
- Check whether an element exists within a tuple.
- remove an item from a tuple
- Convert a tuple to a dictionary.

Q.4 Write a python program to implement binary Search.

Q.5 Write a python program to implement Linear Search.

Q.6 Write a python program to implement selection sort

Q.7 Write a python program to implement merge sort

Q.8 Write a python program to implement quick sort.

Q.9 Write a python program to implement shell Sort

Q.10 Write a menu driven python program to perform matrix addition, subtraction and multiplication.