

## KIET Group of Institutions, Ghaziabad



(An ISO – 9001: 2008 Certified & 'A' Grade accredited Institution by NAAC)

## **Assignment-3**

**Problem 1.** Write a Python program to check if each number is prime in a given list of numbers. Return True if all numbers are prime otherwise False.

Sample Data:

([0, 3, 4, 7, 9]) -> False ([3, 5, 7, 13]) -> True ([1, 5, 3]) -> False

**Problem 2.** Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)] Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]

**Problem 3** Write a Python program to count the number of strings from a given list of strings. The string length is 2 or more and the first and last characters are the same. Sample List: ['abc', 'xyz', 'aba', '1221']

**Problem 4.** Write a program that accept a sentence and build dictionary with LETTERS, DIGITS, UPPERCASE and LOWERCASE as key and their count in the sentences as values. Example :- Sentence="DTU@123e-Learning"

d={"LETTERS":12,"DIGITS":3,UPPERCASE:4,LOWERCASE:8}

**Problem 5.** Write a program to check validity of a password read by user. The following criteria should be used to check the validity. Password should have at least :-

- i) one lower case ii) one digit iii) one upper case
- iv) one special character from [\$,#,@] v) Six Characters vi) Minimum Length of password : 8