**PYTHON ACTIVITY 13):**

1. (Count vowels and consonants) Assume letters A , E , I , O , and U as the vowels. Write a program that prompts the user to enter a string and displays the number of vowels and consonants in the string.

Enter a string: Programming is fun

The number of vowels is 5

The number of consonants is 11

2)(Longest common prefix) Write a program that prompts the user to enter two

strings and displays the largest common prefix of the two strings. Here are some sample runs:

Enter the first string: Welcome to C++

Enter the second string: Welcome to programming

The common prefix is Welcome to

Enter the first string: Atlanta

Enter the second string: Macon

Atlanta and Macon have no common prefix

3)(The Location class) Design a class named Location for locating a maximal

value and its location in a two-dimensional array. The class contains public data

fields row , column , and maxValue that store the maximal value and its indices

in a two-dimensional array with row and column as int types and maxValue as

a double type.

Write the following method that returns the location of the largest element,

The return value is an instance of Location . Write a test program that prompts

the user to enter a two-dimensional array and displays the location of the largest

element in the array. Here is a sample run:

Enter the number of rows and columns in the array: 3 4

Enter the array:

23.5 35 2 10

4.5 3 45 3.5

35 44 5.5 9.6

The location of the largest element is 45 at (1, 2)