**PSG COLLEGE OF TECHNOLOGY**

**DEPARTMENT OF COMPUTER APPLICATIONS**

**I MCA**

**23MX17 DATA STRUCTURES LABORATORY**

**Problem Sheet -3**

**DATE : 01-09-2023 DUE DATE:11-09-2023**

1. Write a program to accept your name and count the number of vowels in it.

**Sample Input:** Alice

**Sample Output: 3**

1. Write a program to accept a string and perform the following operations without using any string functions:

a. Print the length of the string

b. Print the reverse of the string

c. Copy the string to another new string

**Sample Input**

Apple

**Sample Output**

5  
elppA  
Apple

1. Write a program that converts all lowercase characters in a given string to its equivalent uppercase character.

**Sample Input:** abcabcd

**Sample Output**: ABCABCD

1. Write a program that replaces two or more consecutive blanks in a string by a single blank.

**Sample Input**

You are interested in programming

**Sample Output**

You are interested in programming

1. Challenging question: Hackerrank

Write a program to accept a string and a width. Wrap the string into a paragraph of width w.

**Sample Input**

ABCDEFGHIJKLIMNOQRSTUVWXYZ  
4

**Sample Output**

ABCD  
EFGH  
IJKL  
IMNO  
QRST  
UVWX  
YZ