Inspiring Excellence

Course Title: Programming Language II
Course Code: CSE 111
Semester: Summer 2020
Assignment no: 3
Topic: String Manipulation

Easy

1. Given a string, remove all the vowels and print the string with the number of vowels added to the end of the string.

Sample Input
apple
banana

Sample Output
ppl2
bnn3

2. Check if a given string is a palindrome or not. A string is palindromic if it reads the same from both ends. For example

Sample Input
abcba
abbaaa

Sample Output
True
False

This task is case sensitive. So "Abcba" is not palindromic.

3. Write a Python program to add 'ful' at the end of a given string (length must be at least 4). If the given string already ends with 'ful' then add 'ly' instead. If the string length of the given string is less than 4, keep it unchanged.

Sample Input
vow
wonder
tactful

Sample Output
vow
wonderful
tactfully

Medium

1. From a given string, print the string in all uppercase if the number of uppercase letters is more than lowercase letters. Otherwise if lowercase is greater or equal to uppercase letters, print all lowercase. The inputs will contain letters (A-Z, a-z) only.

Sample Input
HOusE
ApplE
BaNaNa

Sample Output
HOUSE
apple
banana

2. Given a string, print whether it is a number, word or mixed with digit and letters. If all the characters are numeric values, print NUMBER. If they are all letters, print WORD. If it is mixed, print MIXED.

Sample Input
213213
jhg231j213
Hello

Sample Output
NUMBER
MIXED
WORD

3. In a given string, there will be two uppercase letters in between some lowercase letters. Print the substring from the first uppercase letter to the last uppercase letter excluding them. If there are no letters in between them, print the word BLANK. It is guaranteed that there will be only two uppercase letters in the string.

Sample Input
baNgladEsh
coDIng

Sample Output
glad
BLANK

4. Write a Python program to find the first appearance of the substring 'too' and 'good' from a given string. If 'too' follows the 'good', replace the whole 'too" good' substring with 'excellent' and print the resulting string. If the above does not appear, print the string as it is.

Sample Input	**Sample Output**
The book is not too good! This book is good too!	The book is not excellent! This book is good too!

Hard

1. Create a string from two given strings by concatenating common characters of the given strings.

Sample Input	**Sample Output**
harry, hermione dean, tom	hrrhr Nothing in common.

2. In 111 Land, a String is said to be Palindrome Substring if it has three equal substrings in the beginning, end and any position in between them. In the string "**fixprefixsuffix**" **fix** is in the beginning, end and in between them. So this string is a Palindrome Substring. The task for this problem is to print the substring for which a given string becomes Palindrome Substring. If it's not Palindrome Substring, then print "Not Palindrome Substring".

Sample Input	**Sample Output**
fixprefixsuffix abcdabc	fix Not Palindrome Substring

3. Again you have lost your USIS password!! You went to the registrar office and requested for a new password. This time, you need to follow some rules to set your password. Otherwise, they won't change it. The rules are

a. At least one lowercase letter
b. At least one uppercase letter
c. At least one digit (0-9)
d. At least one special character (_ , $, #, @)

Your task is to find whether a given password follows all those rules. If it breaks any rule, you have to print Lowercase Missing, Uppercase Missing, Digit Missing or Special Missing respective to the missing case. For more than one rule break, print all the rules that were broken (order doesn't matter). If the password is ok, print OK.

Sample Input
ohMyBR@CU
ohmybracu
OhMyBR@CU20

Sample Output
Digit missing
Uppercase character missing, Digit missing, Special character missing
OK