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Computer Science (3rd Sem)

**Question 7 (From Practical List ) :**

**Solution 🡪**

def menu():

print("\n \t\t\t PROGRAM 7")

print("\t\t =========================")

print("\t\t\t MENU : ")

print("\t1- Find the length of the string")

print("\t2- Find the maximum of three strings")

print("\t3- Find the string and replace vowels with #")

print("\t4- Find the number of words in a given string")

print("\t5- Check if string is a palindrome or not")

print("\t\t =========================")

def maxOfStrings(a,b,c):

if (a.isdigit() and b.isdigit()and c.isdigit):

max=a

if (b>max):

max=b

if (c>max):

max=c

return max

else:

max=len(a)

l2=len(b)

l3=len(c)

if (l2>max):

max=b

if (l3>max):

max=c

else:

max=a

return max

if (max==l2==l3):

if (a>b and a>c):

max=a

elif (b>a and b>c):

max=b

elif (c>a and c>b):

max=c

return max

else:

return max

def replaceVowels(a):

new=""

for i in a:

if (i=='a' or i=='e' or i=='o' or i=='i' or i=='u'):

new+="#"

else:

new+=i

return new

def countWords(a):

count=0

for i in a:

if (i==" " or i=="\t" or i=="\n" or i=="r"):

count+=1

return count

def pallindromeTest(str):

for i in range(0, int(len(str)/2)):

if str[i] != str[len(str)-i-1]:

return False

return True

ch="y"

while(ch=='y' or ch=="Y"):

menu()

choice=int(input("\n -> Enter your choice from the menu : "))

if (choice==1):

print("\n\t OPERATION CHOOSEN : LENGTH OF THE STRING \n")

str\_input=input("Enter the string : ")

lngth=len(str\_input)

print("--> Length of the string - " , lngth)

elif (choice==2):

print("\n\t OPERATION CHOOSEN : MAXIMUM OF THREE STRINGS \n")

str1=input("Enter the first string : " )

str2=input("Enter the second string : " )

str3=input("Enter the third string : " )

str\_max=maxOfStrings(str1,str2,str3)

print("--> The maximum of three strings is : ",str\_max)

elif (choice==3):

print("\n\t OPERATION CHOOSEN : REPLACE VOWELS WITH # \n")

str\_input=input("Enter the string : ")

str\_vow=replaceVowels(str\_input)

print("-->The new string - " , str\_vow)

elif (choice==4):

print("\n\t OPERATION CHOOSEN : COUNT NUMBER OF WORDS \n")

str\_input=input("Enter the string : ")

wordCount=countWords(str\_input)

print("-->Total number of words in string - " , wordCount)

elif (choice==5):

print("\n\t OPERATION CHOOSEN : PALLINDROME TEST \n")

str\_input=input("Enter the string : ")

result=pallindromeTest(str\_input)

if (result):

print("--> The string " ,str\_input, " is a pallindrome")

else:

print("--> The string " ,str\_input, " is not a pallindrome")

else:

print("\n \*\* ERROR : ENTER A VALID CHOICE \*\*\*\n")

ch=input("\n -> Do you want to continue (y/n) : ")

print(" \t \t PROGRAM ENDS HERE ")

