#Task 1 - Sətirdəki bütün saitləri sayan program yazın.( A E İ O U).

#Əgər istifadəçi boşluq daxil edərsə və yaxud sözün daxilində hərf, durğu işarələri olarsa, proqram istifadfəçini yeni söz yazmasını istəyir.

print("\n1. Write a program that counts all the vowels in a line. (A E İ O U).")

counter=0

def vowelCounter(word):

global counter

for x in (word):

if(x=="a" or x=="e" or x=="i" or x=="o" or x=="u" or x=="A" or x=="E" or x=="I" or x=="O" or x=="U"):

counter+=1

return counter\

word=input("\nEnter the word : ")

while True:

if(word.isalpha()==False):

word=input("\nEnter the word, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=vowelCounter(word)

if (result==1):

print("\nThere is",counter,"vowel in the word \"",word,"\".")

elif (result==0):

print("\nThere is no vowel in the word \"",word,"\".")

else:

print("\nThere are",counter,"vowels in the word \"",word,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 2 - Sətirdəki bütün samitləri sayan program yazın.

#Əgər istifadəçi boşluq daxil edərsə və yaxud sözün daxilində hərf olarsa, proqramlar istifadfəçini yeni söz yazmasını istəyir.

#Method 1

print("\n2. Write a program that counts all the consonants in a word.")

print("\nMethod 1")

counter=0

def vowelCounter(word):

global counter

for x in (word):

if(x=="a" or x=="e" or x=="i" or x=="o" or x=="u" or x=="A" or x=="E" or x=="I" or x=="O" or x=="U"):

counter+=1

return counter

word=input("\nEnter the word : ")

while True:

if(word.isalpha()==False):

word=input("\nEnter the word, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=len(word)-vowelCounter(word)

if (result==1):

print("\nThere is",result,"consonant in the word \"",word,"\".")

elif (result==0):

print("\nThere is no consonant in the word \"",word,"\".")

else:

print("\nThere are",result,"consonants in the word \"",word,"\".")

#Method 2

print("\n\nMethod 2")

counter=0

def consonantCounter(word):

global counter

for x in (word):

if(x!="a" and x!="e" and x!="i" and x!="o" and x!="u" and x!="A" and x!="E" and x!="I" and x!="O" and x!="U"):

counter+=1

return counter

word=input("\nEnter the word : ")

while True:

if(word.isalpha()==False):

word=input("\nEnter the word, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=consonantCounter(word)

if (result==1):

print("\nThere is",counter,"consonant in the word \"",word,"\".")

elif (result==0):

print("\nThere is no consonant in the word \"",word,"\".")

else:

print("\nThere are",counter,"consonants in the word \"",word,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 3 - Sətri PigLatin edən funksiya yazın.(Piglatin meselen :Food =>oodfay , Fun=>unfay setri kichik edir ve ilk herfi sona kechirir ve sona ay sozunu elave edir)

#Sözün içində başqa bir böyük hərfin olmasını, rəqəm və ya boşluq daxil edilməsini də nəzərə almışam.

print("\n3. Write the function that translates the word into PigLatin. (Piglatin, for example: Food => oodfay, Fun => unfay makes the word lowercase and ends the first letter and adds the word \"ay\" to the end)")

def getPigLatinForm(word):

a=word[0]

b=word[1:]

d=str(b.lower())

c=str(a.lower())

result=d+c+"ay"

return result

word=input("\nEnter the word : ")

while True:

if(len(word.strip())==0):

word=input("\nEnter the word, not space : ")

elif(word.isalpha()==False):

word=input("\nEnter the word, which not includes digit : ")

else:

break

result=getPigLatinForm(word)

print("\nIf you change the word \"",word,"\" into PigLatin, you get \"",result,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 4 - Funksiya sətirdəki boşluqları müəyyən simvolla əvəzləsin. (Simvolu istifadəçi funksiyaya göndərir)

print("\n4. Let the function replace the spaces in the line with a certain symbol. (The user sends the symbol to the function)")

def replaceSpaceWith(line,symbol):

return line.replace(" ",symbol)

line=input("\nEnter a line with spaces and words : ")

symbol=input("\nEnter the symbol that you want replace with spaces : ")

result=replaceSpaceWith(line,symbol)

print("\nThat is what the line looks like when you add \"",symbol,"\" to the spaces : ",result)

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 5 - Sətir str1 sətir str2-nin suffixi olub olmadığını yoxlayan funksiya yazın.("sa","salam")

#Suffix - son şəkilçi.

#Hər iki ehtimalı - string 1-in string 2-nin suffixi olmasını və tam tərsini string 2-in string 1-nin suffixi olmasını nəzərə aldım.

print("\n5. Write a function that checks whether string1 is a suffix for string 2. (\"he\", \"hello\")")

def isSuffix(str1,str2):

if (len(str1)>len(str2)):

if (str1.endswith(str2)) is True:

return True

return False

elif (len(str1)<len(str2)):

if (str2.endswith(str1) is True):

return True

return False

str1=input("\nEnter the first string : ")

str2=input("\nEnter the second string : ")

while True:

if(str1.isalpha()==False):

str1=input("\nEnter the first string again, which not includes other things (such as spaces,punctuations,digits) : ")

if(str2.isalpha()==False):

str2=input("\nEnter the second string again, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=isSuffix(str1,str2)

if (len(str1)>len(str2)):

if (result==True):

print("\nThe string ""\"",str2,"\" is the suffix of the string \"",str1,"\".")

if (result==False):

print("\nThe string ""\"",str2,"\" is not the suffix of the string \"",str1,"\".")

elif (len(str1)<len(str2)):

if (result==True):

print("\nThe string ""\"",str1,"\" is the suffix of the string \"",str2,"\".")

if (result==False):

print("\nThe string ""\"",str1,"\" is not the suffix of the string \"",str2,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 6 - Sətir str sətir str2-nin prefixi olub olmadığını tapan funksiya yazın.

#Prefix - ön şəkilçi.

#Hər iki ehtimalı - string 1-in string 2-nin prefixi olmasını və tam tərsini string 2-in string 1-nin prefixi olmasını nəzərə aldım.

print("\n5. Write a function that checks whether string1 is a suffix for string 2. (\"he\", \"hello\")")

def isPrefix(str1,str2):

if (len(str1)>len(str2)):

if (str1.startswith(str2)) is True:

return True

return False

elif (len(str1)<len(str2)):

if (str2.startswith(str1) is True):

return True

return False

str1=input("\nEnter the first string : ")

str2=input("\nEnter the second string : ")

while True:

if(str1.isalpha()==False):

str1=input("\nEnter the first string again, which not includes other things (such as spaces,punctuations,digits) : ")

if(str2.isalpha()==False):

str2=input("\nEnter the second string again, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=isPrefix(str1,str2)

if (len(str1)>len(str2)):

if (result==True):

print("\nThe string ""\"",str2,"\" is the prefix of the string \"",str1,"\".")

if (result==False):

print("\nThe string ""\"",str2,"\" is not the prefix of the string \"",str1,"\".")

elif (len(str1)<len(str2)):

if (result==True):

print("\nThe string ""\"",str1,"\" is the prefix of the string \"",str2,"\".")

if (result==False):

print("\nThe string ""\"",str1,"\" is not the prefix of the string \"",str2,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 7 - Sətirin polindrom olub olmadığını yoxlayan funskiya yazın.

print("\n7. Write a function that checks whether the string is a palindrome.")

def palindrome(string):

global string1

if(len(string)%2==0):

string1=string.lower()

a=len(string1)/2

b=string1[:int(a)]

c=string1[int(a):]

d=c[::-1]

if (b==d):

return True

return False

else:

string1=string.lower()

x=len(string1)//2

y=string1[int(x)+1:]

u=string1[:int(x)]

e=u[::-1]

if (e==y):

return True

return False

string=input("\nEnter the string to check : ")

while True:

if(string.isalpha() is False):

string=input("\nEnter the word, which not includes other things (such as spaces,punctuations,digits) : ")

else:

break

result=palindrome(string)

if (result==True):

print("\nThe string \"",string1,"\" is a Palindrome.")

else:

print("\nThe string \"",string1,"\" is not a Palindrome.")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 8 - -The- sözünün cümlədə neçə dəfə olduğunu tapan funksiya yazın.

print("\n8. Type a function that finds how many times the word \"The\" is in the sentence.")

def findThe (sentence):

sentence2=sentence.lower() #"The"-nin istənilən yazılma forması üçün.("THe","The","the","tHE","thE","THE")

return sentence2.count("the")

sentence=input("\nEnter the sentence : ")

result=findThe(sentence)

numberOfWords=len(sentence.split())

if (numberOfWords > 1): #If it is a sentence

if (result > 1):

print("\nThere are",result,"times the word \"the\" in the sentence.")

elif (result == 1):

print("\nThere is 1 word \"the\" in the sentence.")

else:

print("\nThere is no word \"the\" in the sentence.")

else: #If it is not a sentence

if (result == 1):

print("\nThere is 1 word \"the\".")

else:

print("\nThere is no word \"the\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 9 - Cümlədə ən çox hansı hərfin işləndiyini tapan funksiya yazın.

print("\n9. Write a function that finds out which letter is used the most in the sentence.")

def findTheMostUsedLetter(sentence):

max=0

letter=""

for l in sentence:

counter=sentence.count(l)

if (counter > max):

max=counter

letter=l

return letter

sentence=input("\nEnter the sentence : ")

while True:

if (len(sentence)<=2):

sentence=input("Enter the sentence or word that includes letters more than 2 : ")

else:

break

result=findTheMostUsedLetter(sentence)

print("\nThe most used letter is \"",result,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 10 - Cümlədəki ən uzun sözü tapan funksiya yazın.(split lazim ola biler)

#print("\n10. Write the function that finds the longest word in the sentence.")

def theLongestWord(sentence):

max=0

word=""

a=list\_of\_words=sentence.split()

for x in a:

counter=len(x)

if (counter > max):

max=counter

word=x

return word

sentence=input("\nEnter the sentence : ")

result=theLongestWord(sentence)

print("\nThe longest word in the sentence is \"",result,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")

#Task 11 - Cümlədəki ən kiçik sözü tapan funksiya tapın(split lazim ola biler)

print("\n11. Write the function that finds the shortest word in the sentence.")

def theShortestWord(sentence):

min=0

word=""

a=list\_of\_words=sentence.split()

for x in a:

if (x.strip==0):

continue

counter=len(x)

if (counter < min):

min=counter

word=x

return word

sentence=input("\nEnter the sentence : ")

result=theShortestWord(sentence)

print("\nThe shortest word in the sentence is \"",result,"\".")

print("\n\n------------------------------------------------------------------------------------------------------------------------")