

1 Basic Programs

Q1: Python program to check whether the string is Symmetrical or Palindrome

Given a string. the task is to check if the string is symmetrical and palindrome or not. A string is said to be symmetrical if both the halves of the string are the same and a string is said to be a palindrome string if one half of the string is the reverse of the other half or if a string appears same when read forward or backward.

Example



Input: khokho

Output:

The entered string is symmetrical

The entered string is not palindrome

Input: amaama

Output:

The entered string is symmetrical

The entered string is palindrome

Q2: Reverse Words in a Given String in Python

We are given a string and we need to reverse words of a given string

Example



Input: str = "geeks quiz practice code"

Output: str = code practice quiz geeks

Input: str = "my name is laxmi"

Output: str= laxmi is name my

Q3: How to Remove Letters From a String in Python

Strings are data types used to represent text/characters. In this article, we present different methods for the problem of removing the *i*th character from a string and talk about possible solutions that can be employed in achieving them using Python.

Example



Input: 'Geeks123For123Geeks'

Output: GeeksForGeeks

Explanation: In This, we have removed the '123' character from a string.

Q4: Find length of a string in python

Strings in Python are immutable sequences of Unicode code points. Given a string, we need to find its length.

Example



Input : 'abc'

Output : 3

Input : 'hello world !'

Output : 13

Input : ' h e l l o '

Output : 14

Q5: Python – Avoid Spaces in string length

Given a String, compute all the characters, except spaces.

Example



Input : test_str = 'geeksforgeeks 33 best'

Output : 19

Explanation : Total characters are 19.

Input : test_str = 'geeksforgeeks best'

Output : 17

Explanation : Total characters are 17 except spaces.

Q6: Python program to print even length words in a string

Given a string. The task is to print all words with even length in the given string.

Example



Input : s = "This is a python language"

Output : This is python language

Input : s = "i am laxmi"

Output : am

Q7: Python – Uppercase Half String

Given a String, perform uppercase of the later part of the string.

Example



Input : test_str = 'geeksforgeek'

Output : geeksfORGEEK

Explanation : Latter half of string is uppercased.

Input : test_str = 'apples'

Output : appLES

Explanation : Latter half of string is uppercased.

Q8:Python program to capitalize the first and last character of each word in a string

Given the string, the task is to capitalize the first and last character of each word in a string.

Example



Input : hello world

Output : Hello World

Input : welcome to geeksforgeeks

Output : WelcomE TO GeeksforgeekS

Q9: Python program to check if a string has at least one letter and one number

Given a string in Python. The task is to check whether the string has at least one letter(character) and one number. Return “True” if the given string fully fill the above condition else return “False” (without quotes).

Example



Input : welcome2ourcountry34

Output : True

Input : stringwithoutnum

Output : False

Q10: Python Program to Accept the Strings Which Contains all Vowels

Given a string, the task is to check if every vowel is present or not. We consider a vowel to be present if it is present in upper case or lower case. i.e. 'a', 'e', 'i', 'o', 'u' or 'A', 'E', 'I', 'O', 'U'.

Example



Input : geeksforgeeks

Output : Not Accepted

All vowels except 'a','i','u' are not present

Input : ABeeIghiObhkUul

Output : Accepted

All vowels are present

Q11: Python — Count the Number of matching characters in a pair of string

Given a pair of non-empty strings. Count the number of matching characters in those strings (consider the single count for the character which have duplicates in the strings).

Example

**Input :**

```
str1 = 'abcdef'
```

```
str2 = 'defghia'
```

Output : 4

(i.e. matching characters :- a, d, e, f)

Input :

```
str1 = 'aabcddekll12@'
```

```
str2 = 'bb22ll@55k'
```

Output : 5

(i.e. matching characters :- b, 1, 2, @, k)

Q12: Python program to count number of vowels using sets in given string

Given a string, count the number of vowels present in the given string using Sets. You can use sets to count the number of vowels in a given string in Python. Sets are useful to efficiently check for counting the unique occurrences of vowels.

Example



Input : GeeksforGeeks

Output : No. of vowels : 5

Explanation: The string GeeksforGeeks contains 5 vowels in it 4 letter of 'e' and 1 'o'.

Q13: Remove all duplicates from a given string in Python

We are given a string and we need to remove all duplicates from it? What will be the output if the order of character matters?

Example



Input : geeksforgeeks

Output : geksfors

Q14: Python – Specific Characters Frequency in String List

Given a String list, extract frequency of specific characters in the whole strings list.

Example



Input : test_list = ["geeksforgeeks is best for geeks"], chr_list = ['e', 'b', 'g', 'f']

Output : 'g': 3, 'e': 7, 'b': 1, 'f': 2

Explanation : Frequency of certain characters extracted.

Input : test_list = ["geeksforgeeks"], chr_list = ['e', 'g']

Output : 'g': 2, 'e': 4

Explanation : Frequency of certain characters extracted.

Q15: Program to check if a string contains any special character

Given a string, the task is to check if that string contains any special character (defined special character set). If any special character is found, don't accept that string.

Example



Input : Geeks\$For\$Geeks

Output : String is not accepted.

Input : Geeks For Geeks

Output : String is accepted

Q16: Generating random strings until a given string is generated

Given the string, the task is to generate the same string using the random combination of special character, numbers, and alphabets.

Example



Input : GFG

Output :

n4W

mK7

k1x

q;; !g

.

.

.

.

.

GF,

GFf

GFp

GFG

Target matched after 167 iterations

Q17: Find words which are greater than given length k

A string is given, and you have to find all the words (substrings separated by a space) which are greater than the given length k.

Example

**Input :**

str = "hello geeks for geeks is computer science portal"

k = 4

Output : hello geeks geeks computer science portal

Explanation : The output is list of all words that are of length more than k.

Input :

str = "string is fun in python"

k = 3

Output : string python

Q18: Python program for removing i-th character from a string

Given the string, we have to remove the ith indexed character from the string. In any string, indexing always start from 0. Suppose we have a string geeks then its indexing will be as –

Example



```
g e e k s  
0 1 2 3 4
```

Input :

Geek

i = 1

Output : Gek

Input :

Peter

i = 4

Output : Pete

Q19: Python program to split and join a string

Python program to Split a string based on a delimiter and join the string using another delimiter. Splitting a string can be quite useful sometimes, especially when you need only certain parts of strings. A simple yet effective example is splitting the First-name and Last-name of a person. Another application is CSV(Comma Separated Files). We use split to get data from CSV and join to write data to CSV. In Python, we can use the function split() to split a string and join() to join a string.

Example



Split the string into list of strings

Input : Geeks for Geeks

Output : ['Geeks', 'for', 'Geeks']

Join the list of strings into a string based on delimiter ('-')

Input : ['Geeks', 'for', 'Geeks']

Output : Geeks-for-Geeks

Q20: Python — Check if a given string is binary string or not

Given string str. The task is to check whether it is a binary string or not.

Example



Input: str = "01010101010"

Output: Yes

Input: str = "geeks101"

Output: No

Q21: Python — Find all close matches of input string from a list

We are given a list of pattern strings and a single input string. We need to find all possible close good enough matches of input string into list of pattern strings. Examples:

Example

**Input :**

```
patterns = ['ape', 'apple', 'peach', 'puppy'],  
input = 'appel'
```

Output : ['apple', 'ape']

Q22: Python program to find uncommon words from two Strings

Given two sentences as strings A and B. The task is to return a list of all uncommon words. A word is uncommon if it appears exactly once in any one of the sentences, and does not appear in the other sentence. Note: A sentence is a string of space-separated words. Each word consists only of lowercase letters.

Example

Input : A = "Geeks for Geeks", B = "Learning from Geeks for Geeks"

Output : ['Learning', 'from']

Input : A = "apple banana mango" , B = "banana fruits mango"

Output : ['apple', 'fruits']

Q23: Python — Swap commas and dots in a String

The problem is quite simple. Given a string, we need to replace all commas with dots and all dots with the commas. This can be achieved in many different ways.

Example



Input : 14, 625, 498.002

Output : 14.625.498, 002

Q24: Python — Permutation of a given string using inbuilt function

A permutation, also called an “arrangement number” or “order”, is a rearrangement of the elements of an ordered list S into a one-to-one correspondence with S itself. A string of length n has $n!$ permutations.

Example



Input : str = 'ABC'

Output :

ABC

ACB

BAC

BCA

CAB

CBA