1. **STRING OPERATIONS AND METHODS**

1.Write a program to find the number of special characters in the given statement

Sample Input:

Given statement: Modi Birthday @ September 17, #&$% is the wishes code for him.

Sample Output:

Number of special Characters: 5

2. Write a program to print the number of vowels and number of consonants in the given statement and which is maximum?

Sample Input:

Saveetha School of Engineering Sample Output:

Number of vowels = 12 Number of Consonants = 15

Test cases:

1. India is my country

2. All are my brothers and sisters

3. Why dry sky

4. Shy Try Cry

5. EDUCATION

3. Program to find whether two strings have same character in same index and returns the number of matches

Sample input:

S1=”what”

S2=”watch”

Sample output:

1

4. Program to print number of words in a line and number of lines in a para

Sample input:

'''This is the most straightforward way to count the number

of lines in a text file in Python. The readlines() method reads all

lines from a file and stores it in a list. Next, use the len() function

to find the length of the list which is nothing but total lines present in a file.'''

Sample output:

Number of lines: 3

Number of words in each line:

Line 1 18

Line 2 15

Line 3 22

5. Program to find number of sentences starts with "B"

Sample input:

'''The apple doesn't fall. ...

All that glitters are not gold. ...

A picture is worth a thousand words. ...

Beggers can't be choosers. ...

A bird in the hand. ...

Better safe than sorry. ...

An apple a day keeps doctor away. ...

Blood is thicker than water. ...'''

Sample output:

Total number of lines: 8

Number of Sentences that start with letter B : 3

6. Write a program that finds whether a given character is present in a string or not. In case it is present it prints the index at which it is present. Do not use built-in find functions to search the character.

Sample Input:

Enter the string: I am a programmer Enter the character to be searched: p

Sample Output:

P is found in string at index: 8

Note: Check for non-available Character in the given statement as Hidden Test case.

7. Write a program to arrange the letters of the word alphabetically in Normal order and reverse order

Sample Input:

Enter the word: MOSQUE Sample Output:

Alphabetical Order Normal: E M O Q S U Alphabetical Order Reverse: U S Q O M E

Test Case:

1. SAPONIFICATION

2. MEMORANDUM

3. DISTRIBUTION

4. SATISFACTION

5. PROPAGATION

8. Write a program to find the number of letters repeatedly present in the given word and print the Repeated letters.

Sample Input:

Enter the word: TEMPLE Sample Output:

Number of repeated letters = 1 Repeated letter = E

Test Case:

1. HYPOTHECATION

2. MATRICULATION

3. MANIPULATION

4. SIMPLIFICATION

5. DEDICATION

9. Write a program to print vowels and consonants from the given word in alphabetical order and print which is maximum, if both vowel count and consonant count is equal then prints Equal?

Sample Input:

Enter the word: EDUCATION Sample Output:

Vowels in alphabetical order: A, E, I, O, U Consonants in alphabetical order: C, D, N, T Maximum Count: Vowels

Test cases:

1. HYPOTHECATION

2. MATRICULATION

3. MANIPULATION

4. SEDIMENTATION

5. EXPERIMENTATION

10. Write a program that accepts a string from user and re displays the same string after removing vowels from it.

Sample Input & Output:

Enter a string: we can play the game The string without vowels is: w cn ply th gm

11. Given two strings “s” and “t”, determine if they are isomorphic.

Input: s = "egg", t = "add"

Output: true

12. Given an integer n, return the number of strings of length n that consist only of vowels

(a, e, i, o, u) and are lexicographically sorted.

Input: n = 2

Output: 15

13. Given a string S consisting of N lowercase alphabets, the task is to modify the string S by

replacing each character with the alphabet whose circular distance from the character is equal

to the frequency of the character in S.

Input: S=“ghee”

Output: higg

14. Given two strings S1 and S2, representing sentences, the task is to print both sentences after removing all words which are present in both sentences

Input: S1 = “sky is blue in color”, S2 =”Raj likes sky blue color “

Output: is in

Raj likes

15. Given a string s consisting of words and spaces, return *the length of the* ***last*** *word in the*

*string.* A **word** is a maximal substring consisting of non-space characters only.

Test Case:

Input: s = "Hello World"

Output: 5

16. Given a string s and an integer k, return the length of the longest substring of s such that the frequency of each character in this substring is greater than or equal to k.

s consists of only lowercase English letters.

Test cases:

1.Input: s = "aaabb", k = 3

Output: 3

17. Reverse Words in a String

Given an input string s, reverse the order of the words.

Input: s = "the sky is blue"

Output: "blue is sky the"

18. Raju, has again started troubling people in your city. The people have turned on to you for

getting rid of Raju. Raju presents to you a number consisting of numbers from 0 to 9

characters. He wants you to reverse it from the final answer such that the number becomes

Mirror number. A Mirror is a number which equals its reverse. The hope of people are on you

so you have to solve the riddle. You have to tell if some number exists which you would

reverse to convert the number into Mirror

Sample input:

Enter the number: 123456

Sample output:

Mirror image: 654321

19. Given an array of strings strs, group **the anagrams** together. You can return the answer

in **any order**.

Input: strs = ["eat","tea","tan","ate","nat","bat"]

Output: [["bat"],["nat","tan"],["ate","eat","tea"]]

20. Program to print first letters of the word in a sentence separated by dot.

Sample input: "The cat on the wall"

Sample output: T.C.O.T.W.

21. Valid Palindrome

A phrase is a palindrome if, after converting all uppercase letters into lowercase letters and

removing all non-alphanumeric characters, it reads the same forward and backward.

Alphanumeric characters include letters and numbers.

Given a string s, return true if it is a palindrome, or false otherwise.

**Test Cases:**

1.Input: s = "A man, a plan, a canal: Panama"

Output: true

22. Write a function delchar(s,c) that takes as input strings s and c, where c has length 1 (i.e., a single character), and returns the string obtained by deleting all occurrences of c in s. If c has a length other than 1, the function should return s.

Sample Input:

Enter the string: Hello world

Enter a character to be deleted: l

Sample output:

String after the character is removed: Heo Word

23. Given two strings haystack and needle, return the index of needle in haystack, if not return -1.

Sample input:

Haystack=’sadbutsad’

Needle=’sad’

Sample output:

[0,6]

24. Longest Substring with At Least K Repeating Characters

Given a string s and an integer k, return the length of the longest substring of s such that the

frequency of each character in this substring is greater than or equal to k.

s consists of only lowercase English letters.

Test cases:

1.Input: s = "aaabb", k = 3

Output: 3

25. Program to accept the strings which contains all vowels.

Input : ABeeIghiObhkUul

Output : Accepted

All vowels are present

26. Write functions to perform the following String operations and identify the vowels count in string S3.

Sample input: Index: 1

S1=’welcome’ S2=’Homely’

Sample output: wHeolmceolmye