## **String Programming Exercises:**

# 1. Write a program to find length of a string.

#### Input

Input string: I love programming. I love Codeforwin.

## Output

Length of string: 38

# 2. Write a program to copy one string to another string.

# Input

Input string: I love Codeforwin!

# Output

Original string: I love Codeforwin!

Copied string: I love Codeforwin!

## 3. Write a C program to concatenate two strings.

# Input

Input string1: I love

Input string2: Codeforwin

## Output

Concatenated string: I love Codeforwin

## 4. Write a C program to compare two strings.

## Input

Input string1: Learn at Codeforwin.

Input string2: Learn at Codeforwin.

# Output

Both strings are lexographically equal.

## 5. Write a C program to convert lowercase string to uppercase.

#### Input

Input string: I love Codeforwin.

## Output

I LOVE CODEFORWIN.

# 6. Write a C program to convert uppercase string to lowercase.

## Input

Input string: I love CODEFORWIN.

## Output

Lowercase string: i love codeforwin.

# 7. Write a C program to toggle case of each character of a string.

## Input

Input string: Learn at Codeforwin.

## Output

Toggled case string: IEARN AT cODEFORWIN.

# 8. Write a C program to find total number of alphabets, digits or special character in a string.

## Input

Input string: I love Codeforwin.

# Output

Alphabets = 15

Digits = 0

Special characters = 3

## 9. Write a C program to count total number of vowels and consonants in a string.

## Input

Input string: I love Codeforwin.

#### Output

Total Vowels = 7

Total Consonants = 8

# 10. Write a C program to count total number of words in a string.

#### Input

Input string: I love Codeforwin.

## Output

Total number of words: 4

# 11. Write a C program to find reverse of a string.

# Input

Input String: Hello

## Output

olleH

12. Write a C program to check whether a string is palindrome or not.

## Input

Input string: madam

## Output

Palindrome string

13. Write a C program to reverse order of words in a given string.

## Input

Input string: I love learning programming at Codeforwin

# Output

#### Reversed order of words:

Codeforwin at programming learning love I

14. Write a C program to find first occurrence of a character in a given string.

## Input

Input string: I love Codeforwin.

Input character to search: o

## Output

'o' is found at index 3

15. Write a C program to find last occurrence of a character in a given string.

## Input

Input string: I love Codeforwin.

Input character to search: o

## Output

Last index of 'o' is 12.

# 16. Write a C program to search all occurrences of a character in given string.

# Input

Input string: I love programming. I love Codeforwin.

Input character to search: o

# Output

'o' found at index: 3, 9, 23, 28, 32

# 17. Write a C program to count occurrences of a character in given string.

# Input

Input string: I love programming. I love Codeforwin.

Input character to search: o

# Output

Total occurrences of 'o': 5

# 18. Write a C program to find highest frequency character in a string.

# Input

Input string: I love Codeforwin.

## Output

Maximum occurring character: 'o'

# 19. Write a C program to find lowest frequency character in a string.

#### Input

Input string: I love learning programming at Codeforwin.

## Output

Minimum occurring character is '.' = 1

# 20. Write a C program to count frequency of each character in a string.

#### Input

Input string: Codeforwin

## Output

Frequency of all characters in the given string:

$$c' = 1$$

$$'d' = 1$$

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'e' = 1
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$$'f' = 1$$

$$'i' = 1$$

$$'n' = 1$$

$$'0' = 2$$

$$'r' = 1$$

$$'w' = 1$$

# 21. Write a C program to remove first occurrence of a character from string.

## Input

Input string: I Love programming. I Love Codeforwin. I Love India.

Input character to remove: 'I'

## Output

Love Programming. I Love Codeforwin. I Love India.

## 22. Write a C program to remove last occurrence of a character from string.

## Input

Input string: I love programming. I love Codeforwin.

Input character to remove: 'I'

#### Output

String after removing last 'I': I love programming. love Codeforwin.

# 23. Write a C program to remove all occurrences of a character from string.

## Input

Input string: I Love Programming. I Love Codeforwin.

Input character to remove: 'I'

## Output

String after removing all 'I': Love Programming. Love Codeforwin.

# 24. Write a C program to remove all repeated characters from a given string.

#### Input

Input string: Programming in C.

#### Output

String after removing duplicate characters: Progamin C.

25. Write a C program to replace first occurrence of a character with another in a string.

### Input

Input string: I love programming.

Input character to replace: .

Input character to replace with: !

# Output

String after replacing '.' with '!': I love programming!

26. Write a C program to replace last occurrence of a character with another in a string.

## Input

Input string: Do you love programming.

Input character to replace: .

Input character to replace with: ?

#### Output

String after replacing last '.' with '?': Do you love programming?

27. Write a C program to replace all occurrences of a character with another in a string.

#### Input

Input string: I\_love\_learning\_at\_Codeforwin.

Input character to replace: \_

Input character to replace with: -

#### Output

String after replacing '\_' with '-': I-love-learning-at-Codeforwin

28. Write a C program to find first occurrence of a word in a given string.

#### Input

Input string: I love programming!

Input word to search: love

## Output

'love' is found at index 2.

# 29. Write a C program to find last occurrence of a word in a given string.

#### Input

Input string: I love programming. I love Codeforwin.

Input word: love

## Output

'love' is found at index: 22

## 30.Write a C program to search all occurrences of a word in given string.

#### Input

Input string: I love programming. I love Codeforwin.

Input word to search: love

### Output

'love' is found at index: 2

'love' is found at index: 22

## 31.Write a C program to count occurrences of a word in a given string.

## Input

Input string: I love programming. I love Codeforwin.

Input word to search: love

## Output

Total occurrences of 'love': 2

# 32.Write a C program to remove first occurrence of a word from string.

#### Input

Input string: Learn programming at Codeforwin.

Input word to remove: Learn

## Output

String after removing 'Learn':

programming at Codeforwin.

# 33. Write a C program to remove last occurrence of a word in given string.

#### Input

Input string: I am a programmer. I learn at Codeforwin.

Input word to remove: I

# Output

String after removing last occurrence of 'I':

I am a programmer. learn at Codeforwin

# 34.Write a C program to remove all occurrence of a word in given string.

## Input

Input string: I love programming. I love Codeforwin.

Input word to remove: I

# Output

String after removing 'I':

love programming. love Codeforwin.

# 35.Write a C program to trim leading white space characters from given string.

## Input

Input string: Lots of leading space.

#### Output

String after removing leading white spaces:

Lots of leading space.

# 36.Write a C program to trim trailing white space characters from given string.

# Input

Input string: "Lots of trailing white spaces."

## Output

String after removing trailing white spaces:

"Lots of trailing white spaces."

# 37.Write a C program to trim both leading and trailing white space characters from given string.

# Input

Input string: " Lots of leading and trailing spaces. "

# Output

String after removing leading and trailing white spaces:

"Lots of leading and trailing spaces."

38.Write a C program to remove all extra blank spaces from given string.

# Input

Input string: Learn C programming at Codeforwin.

# Output

String after removing extra blanks:

Learn C programming at Codeforwin.