Strings - Handling strings and common string functions Functions - parameter passing, return

1. Count Vowels and Consonants

Problem:

Write a Java program to count the number of vowels and consonants in a given string.

2. Reverse a String

Problem:

Write a Java program to reverse a given string without using any built-in reverse functions.

3. Palindrome String Check

Problem:

Write a Java program to check if a given string is a palindrome (a string that reads the same forward and backward).

4. Remove Duplicates from a String

Problem:

Write a Java program to remove all duplicate characters from a given string and return the modified string.

5. Find the Longest Word in a Sentence

Problem:

Write a Java program that takes a sentence as input and returns the longest word in the sentence.

6. Find Substring Occurrences

Problem:

Write a Java program to count how many times a given substring occurs in a string.

7. Toggle Case of Characters

Problem:

Write a Java program to toggle the case of each character in a given string. Convert uppercase letters to lowercase and vice versa.

8. Compare Two Strings

Problem:

Write a Java program to compare two strings lexicographically (dictionary order) without using built-in compare methods.

Example Input:

```
String 1: "apple"
String 2: "banana"
```

Expected Output:

```
"apple" comes before "banana" in lexicographical order
```

9. Find the Most Frequent Character

Problem:

Write a Java program to find the most frequent character in a string.

Example Input:

```
String: "success"
```

Expected Output:

```
Most Frequent Character: 's'
```

10. Remove a Specific Character from a String

Problem:

Write a Java program to remove all occurrences of a specific character from a string.

Example Input:

```
String: "Hello World"
Character to Remove: '1'
```

Expected Output:

```
Modified String: "Heo Word"
```

- 11. Write a Java program that accepts two strings from the user and checks if the two strings are anagrams of each other (i.e., whether they contain the same characters in any order).
- 12. Write a replace method in Java that replaces a given word with another word in a sentence: