IMPLEMENTATION OF STRINGS

Assignment -3 | SEM - 2

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1. WAP to find out number of uppercase & lowercase characters, blank spaces and digits from the string

CODE

```
import java.util.Scanner;

class CountChars {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a string: ");
        String str = sc.nextLine();

        int upperCount = 0, lowerCount = 0, spaceCount = 0, digitCount =
        for (int i = 0; i < str.length(); i++) {
            char ch = str.charAt(i);
            if (Character.isUpperCase(ch)) {
                upperCount++;
            } else if (Character.isLowerCase(ch)) {
                lowerCount++;
            } else if (Character.isDigit(ch)) {
                digitCount++;
            } else if (ch == ' ') {
                spaceCount++;
            }
        }

        System.out.println("Uppercase characters: " + upperCount);
        System.out.println("Lowercase characters: " + lowerCount);
        System.out.println("Digits: " + digitCount);
        System.out.println("Spaces: " + spaceCount);
    }
}
```

OUTPUT

```
C:\Users\ayush\Desktop\JAVA_assignment>javac CountC

C:\Users\ayush\Desktop\JAVA_assignment>java CountCh
Enter a string: AAA aaa BBB ccc 12345
Uppercase characters: 6
Lowercase characters: 6
Digits: 5
Spaces: 4
```

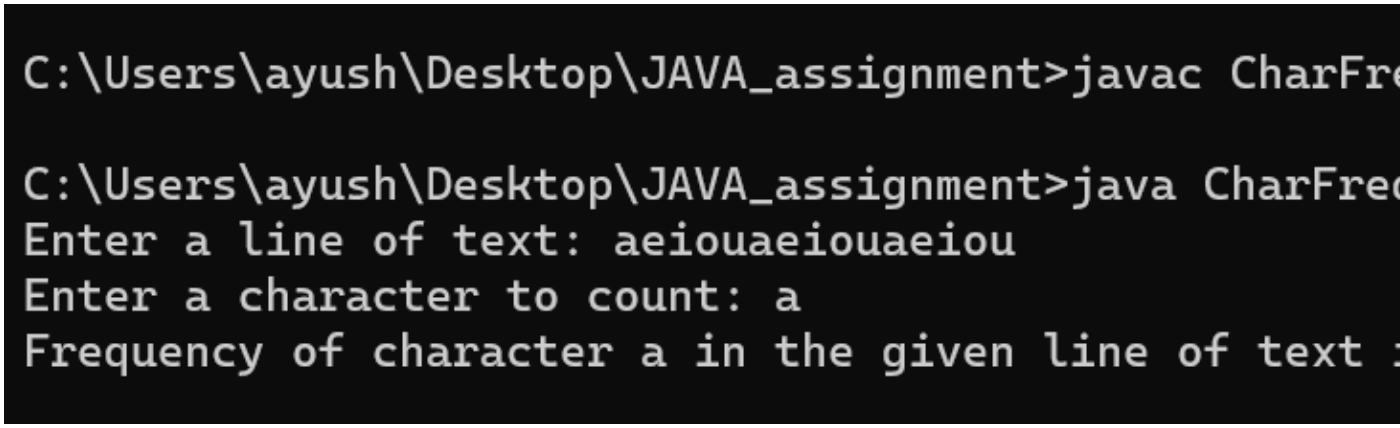
2. WAP to count the frequency of occurrence of a given character in a given line of text.

CODE

```
import java.util.Scanner;

public class CharFrequency {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a line of text: ");
        String line = sc.nextLine();
        System.out.print("Enter a character to count: ");
        char ch = sc.nextLine().charAt(0);
        int count = 0;
        for (int i = 0; i < line.length(); i++) {
            if (line.charAt(i) == ch) {
                count++;
            }
        }
        System.out.println("Frequency of character " + ch + " in the given line of
    }
}
```

OUTPUT



3. WAP to check if a string is a palindrome or not using inbuild functions.

CODE

```java
import java.util.Scanner;

class Pallindrome {
    public static void main(String[] args) {
        String str = "abbba";
        int l = 0;
        int h = str.length() - 1;
        int flag = 0;
        while (h > l) {
            if (str.charAt(l++) != str.charAt(h--)) {
                System.out.println(str + " is not a palindrome");
                return;
            } else {
                flag = 1;
            }
        }
        if (flag == 1) {
            System.out.println(str + " is a palindrome");
        }
    }
}
```

OUTPUT

```
C:\Users\ayush\Desktop\JAVA_assignment>javac Pallin

C:\Users\ayush\Desktop\JAVA_assignment>java Pallind
abbba is a palindrome
```