Lab 6 - Strings

1. Write a c Program to Find the Frequency of Characters in a String

- In this program, the string entered by the user is stored in `str`.
- Then, the user is asked to enter the character whose frequency is to be found. This is stored in variable `ch`.
- Then, a `for` loop is used to iterate over characters of the string. In each iteration, if the character in the string is equal to the `ch`, `count` is increased by 1.
- Finally, the frequency stored in the `count` variable is printed.
    - Note: This program is case-sensitive i.e. it treats uppercase and lowercase versions of the same alphabet as different characters.

```
Enter a string: This website is awesome.
Enter a character to find its frequency: e
Frequency of e = 4
```

2. Write a c Program to copy String Without Using strcpy()

- The program should copy the content of string `s1` to string `s2` manually.

```
Enter string s1: Hey fellow programmer.
String s2: Hey fellow programmer.
```

3. Write a c Program to Sort Elements in Lexicographical Order (Dictionary Order)

- To solve this program, a two-dimensional string named `str` is created.
- The string can hold a maximum of `5` strings and each string can have a maximum of `50` characters (including the `null` character).
- In the program, we have used two library functions:
    - strcmp() - to compare strings
    - strcpy() - to copy strings
- These functions are used to compare strings and sort them in the correct order.

```
Enter 5 words: R programming
JavaScript
Java
C programming
C++ programming

In the lexicographical order:
C programming
C++ programming
Java
```

```
JavaScript
R programming
```