General Instructions

- Maintain a proper observation of the experiments you perform in lab sessions.
- Keep your code with proper hierarchical structure for your future reference.
- Must use the starter codes provided. Do not change variables/function names.

Experiment 1

To complete the experiment, you need to open the file named ex1.c and fill in the appropriate code wherever the comment "YOUR CODE GOES HERE" appears. Seven changes need to be made, and a few reruns may be required. Simply browse the comments in the file and make the necessary changes to finish the experiment.

Experiment 2

Write a C program to remove a character from the string. (Three changes/Additions needed)

- Remove the first occurrence of the character
- Remove all occurrences

Test case

- Input: "YOU ONLY LIVE ONCE", remove the character 'O'
- Output: case 1:"YU ONLY LIVE ONCE" case 2:"YU NLY LIVE NCE"

Experiment 3

!!SPOILER ALERT!!
In the book Harry Potter and the Chamber of Secrets, the character known as "you-know-who" mentions the connection between his given muggle name "Tom Marvolo Riddle" and his true identity. To test this connection using C programming, we need to write a program that checks whether two strings have the same set of characters.

Test case

- Input: str1= "TOM MARVOLO RIDDLE", str2="IMMORTAL DOVE LORD"
- Output: They have the same set of characters

Experiment 4

Write a C program with a function *bool reverseString(char *myString)* that reverses the string and returns true when it is a palindrome.

Experiment 5

Write a C program using a structure to store personal details and print each element.

Structure to be used

```
struct Personal{
int age;
char *name;
char *native;
int roll_no[10];
};
```