

Lab 6

Instructions: Implement custom string functions.

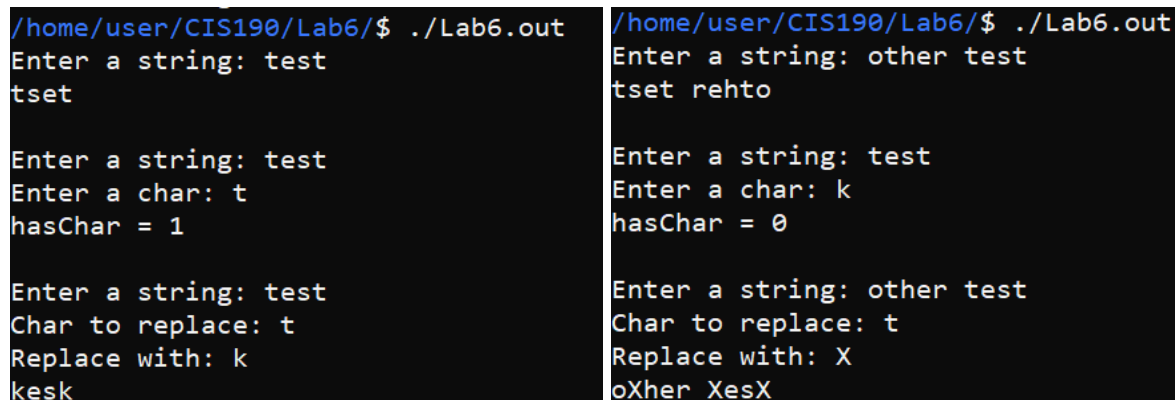
Objectives:

- Continued practice with functions/function calls.
- Continued practice with strings.
- Continued practice with input/output.

Task: Implement the following functions in a C program called Lab6.c.

- **void reverse(char *str):** Given some string str, prints the string in reverse.
Example:
 - o reverse("test") → Prints "tset".
- **int hasChar(char *str, char c):** Returns 1 if c is contained in str, or 0 if not.
Examples:
 - o hasChar("test", 't') → 1
 - o hasChar("test", 'k') → 0
- **void replaceChar(char *str, char old, char new):** Replaces old with new in str.
 - o replaceChar("test", 't', 'k') → "kesk"

In the main function, use fgets and getchar to prompt the user for different inputs, then print the results of the three functions as shown in Figure 1.



```
/home/user/CIS190/Lab6/$ ./Lab6.out
Enter a string: test
tset

Enter a string: test
Enter a char: t
hasChar = 1

Enter a string: test
Char to replace: t
Replace with: k
kesk

/home/user/CIS190/Lab6/$ ./Lab6.out
Enter a string: other test
tset rehto

Enter a string: test
Enter a char: k
hasChar = 0

Enter a string: other test
Char to replace: t
Replace with: X
oXher XesX
```

Figure 1. Example outputs for Lab6.c.

Submission details:

- Upload a compressed archive (e.g., .zip) containing Lab6.c.
- The archive should be named Lab6_LastName, where LastName is your last name.
- If you're on Linux, you can use the following command to create a .tar.gz archive from the terminal:

```
$ tar -czvf Lab6_LastName.tar.gz Lab6.c
```

where LastName is your last name.