

Lab 10 Tasks

The C language provides multiple library functions to easily manipulate strings. Your task is to write user-defined functions that will perform the same tasks. Do not use the string.h library functions, gets(), puts(), printf("%s"), scanf("%s") in any of the tasks. Use your own functions that perform the same actions.

Q1. mygets(char ch[]) will take a string as input from the user and store it in the array that was passed to it as an argument when it was called. Add a NULL character at the end of your string when storing it in the array.

Q2. myputs(char ch[]) prints the array that was passed to it as an argument when it was called. At any point during printing the array if you encounter a NULL character then stop printing the rest of the array.

Q3. mystrlen(char ch[]) will return (not print) the length of the array that was passed to it. The length will be the number of characters you encounter before the NULL character.

Q4. mystrcat (char ch1[], char ch2[]) will add the contents of ch2 at the end of ch1. ch2 will remain unchanged. Make sure to remove the NULL character from ch1 before adding ch2 to it.

Q5. mystrcmp (char ch1[], char ch2[]) will return 0 if ch1 and ch2 are identical. In other cases, it will find the first index position, i where ch1 and ch2 does not contain the same value. It will then return ch1[i] – ch2[i].

Q6. mystrstr (char ch1[], char ch2[]) will check if the entire string in ch2 is present as a substring in ch1. If it is present, it will return the starting index position. e.g.

Ch1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| A | n | b | H | a | n | r | a | n | \0 |
|---|---|---|---|---|---|---|---|---|----|

Ch2

| | | | | | | | | | |
|---|---|----|--|--|--|--|--|--|--|
| a | n | \0 | | | | | | | |
|---|---|----|--|--|--|--|--|--|--|

In this case the function will return 4.