

CSC2302 Review Session 3: Strings

Some Quick Questions/Answers!

1. What is a string?

An array of characters: `char MyName[20];`

1.1 What is `'\0'`?

1.2 Should I assign `'\0'` as I fill an array of characters?

1.3 What will happen if `'\0'` was not used?

2. Why handling a string different than an array of int or double?

2.1 Exercise: write a c program that asks the user for the values to save in the following array: `double salaries[5];`

2.2 Now change the previous code so that you fill the following array: `char MyName[20];`

2.3 Anything weird??

----- string.h Functions-----

Assume the following declarations: `char word1[20], word2[20];`

1. **strcpy():** `strcpy(word1," Hang_out");`
 ☞ **Draw the content of word1:**
2. **strncpy():** `strncpy (word1," Black Friday",5);`
 ☞ **Draw the content of word1:**
3. `strcpy(word2,"_poetry");`
 strcat(word1,word2);
 ☞ **Draw the content of word1:**
4. **Can you guess and write the syntax for strncat();**
5. **strlen():** `int x; x=strlen(word1);`
 ☞ **Write down the content of x:**
6. **strcmp():** compare two strings alphabetically and returns an integer:
 0: if the two keywords are the same
 >0: if the second word is alphabetically before the first word
 <0: if the first word is alphabetically before the second word

 ☞ **Try the following: `x= strcmp("Facebook","Instagram");`**
7. **Now let's allow the user to input a word to save into an array of characters**
 - a. **What is the difference between `scanf("%s",word2);` and `gets(word2);`**

8. Rewrite the following code in your machines and enter “Kobe Bryant” as the first input!

```
1 #include<stdio.h>
2 main() {
3
4     char player1[20],player2[20];
5
6     printf("\n\tInput your favorite player:");
7     scanf("%s",player1);
8
9     printf("\n\tInput your second favorite player:");
10    gets(player2);
11
12    printf("\n\n\tFavorite1 is:%s\n\n\tFavorite2 is:%s\n\n\t",player1,player2);
13
14 }
```

Exercise to Solve

Write a C program that counts how many words are in **an array** (1 array) of characters

Exercise to Solve

Write a program that computes how many credits are taken by an AUI student given the courses he/she is taking. Your execution should look like this (input chosen are just examples):

```
How many courses are you taking this semester?:5
Input code for course1:CSC2302
Input code for course2:MTH1304
Input code for course3:MTH2301
Input code for course4:FAS1220
Input code for course5:PHY1401

Your total number credits is:15
Press any key to continue . . . _
```

Exercise to Solve

In the last code you had in Review 2, you had to work with two arrays IDs and clients salaries respectively. Please add clients Names and change what need to be changed in your code!