

CSC 215
Procedural Programming with C
Lab #2
Introduction to Strings

Tutorial Section

- Defining a constant variable.
 - `#define VARIABLE_NAME VARIABLE_VALUE`
- Arrays
 - Creating an array. `TYPE VARIABLE_NAME [ARRAY_SIZE];`
 - To use an array of char as a string, the char `'\0'` needs to be at the end. Using `scanf` with `%s` will add it automatically.
- String library.
 - Include `string.h` in your code.
 - `strcpy(DISTENATION_STRING, SOURCE_STRING);`
 - Copies all of `SOURCE_STRING` characters into `DISTENATION_STRING`.
 - `strcat(DISTENATION_STRING, SOURCE_STRING);`
 - Adds all of `SOURCE_STRING` characters to the end of `DISTENATION_STRING`.
 - `strlen(STRING);`
 - Returns the number of characters in a string without counting `'\0'`.

Lab Section

- Define a constant variable called MAX with the value 50.
- Create two char arrays (FirstName and LastName). Use MAX as their size.
- Create a third char array (Name) with the size of Max * 2.
- Write a program that asks the user to input his first name and last name. Then using strcpy and strcat, concatenate the two strings and store them into the third string. Then print the users name along with its length (strlen) (Don't count the space in the middle).
- After that, print the following:
 - Tell the user which one is longer, his first or his last name.
 - The full name in capital letters.
 - The full name in small letters.

Hint:

<i>Character</i>	<i>ASCII</i>	<i>Character</i>	<i>ASCII</i>
A	65	a	97
Z	90	z	122

- Example run:

```
$. /lab2
Enter your first name: Marwan
Enter your last name: Almaymoni
Your name is Marwan Almaymoni and it is 15 letters.
Your last name is longer than your first name.
Your name in capital letters is MARWAN ALMAYMONI.
Your name in small letters is marwan almaymoni.
```

SUBMIT POLICY: -

- Name the .c file using the follow naming convention:
Lab2_ID_FirstName_LastName.c
 - **Example:** Lab2_123456789_Marwan_Almaymoni.c
- Use a comment to write your name and ID at the beginning of the code.
- The Deadline is: 23/2/2015 before the class starts.
- Late submissions will not be accepted.
- Email submissions will not be accepted.
- **-1 Point** for not following the naming convention.
- **-1 Point** for not writing your name and ID in the code.
- **-8 Points** if the submitted program didn't work due to syntax errors.
- **-10 Points** for cheating and helping others cheat.