Lab7: C-Strings & Functions

UNT CSCE1030 Spring 2021

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Options

- The lab is due Frinday by 11.59 pm

1. WORK BY YOURSELF: This lab instructions are available on Canvas. If you feel comfortable with this assignment, you can do it by yourself. Ask me to check it in the very end before you submit it.
2. WORK WITH ME: Follow the steps I describe on the slide.

What Do We Need to Submit?

- Four files for two tasks:
- Lab8A.cpp
- Lab8B.cpp
- Lab8C.cpp

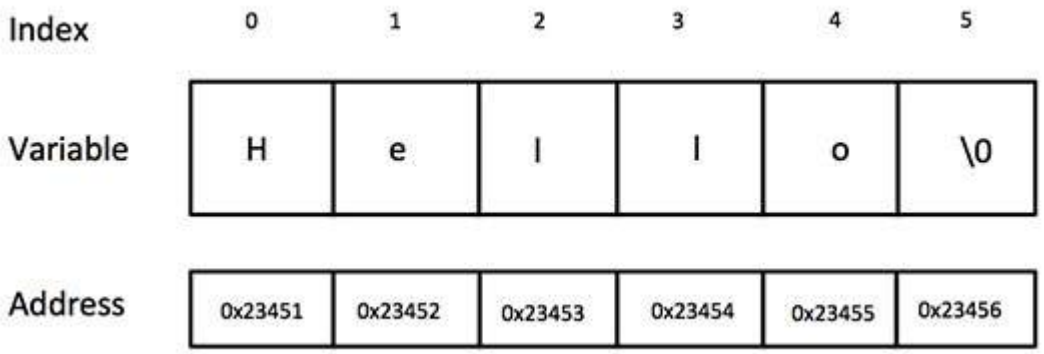
Step1: Prepare the working space

1. Pull up the **.pdf file for Lab8** from your canvas account;
2. Start **Putty** (cse01.cse.unt.edu)
3. If needed, open lecture slides.

C-Strings

- The C-style character string originated within the C language and continues to be supported within C++.
  This string is actually a one-dimensional array of characters which is terminated by a **null** character '\0'.

```
char greeting[6] = {'H', 'e', 'l', 'l', 'o', '\0'};
char greeting[] = "Hello";
```



Operations with c-strings

1. **strcmp(string1, string2) -- comparison**

Return 0 – when strings are identical;

Return ASCII value of absolute difference in sums of the two strings.

2. **strcpy(target_string, source string); -- copying**

Copies the C-string variable `source_string` into the C-string variable `target_string`.

3. **int length = strlen(source_string); -- length**

4. **cin.getline(string_variable, max_chars+1); -- reading in input**

(check for more in the pdf)

Function declaration

- return_type **function_name**(parameter list)
- { body of the function }

Return Type

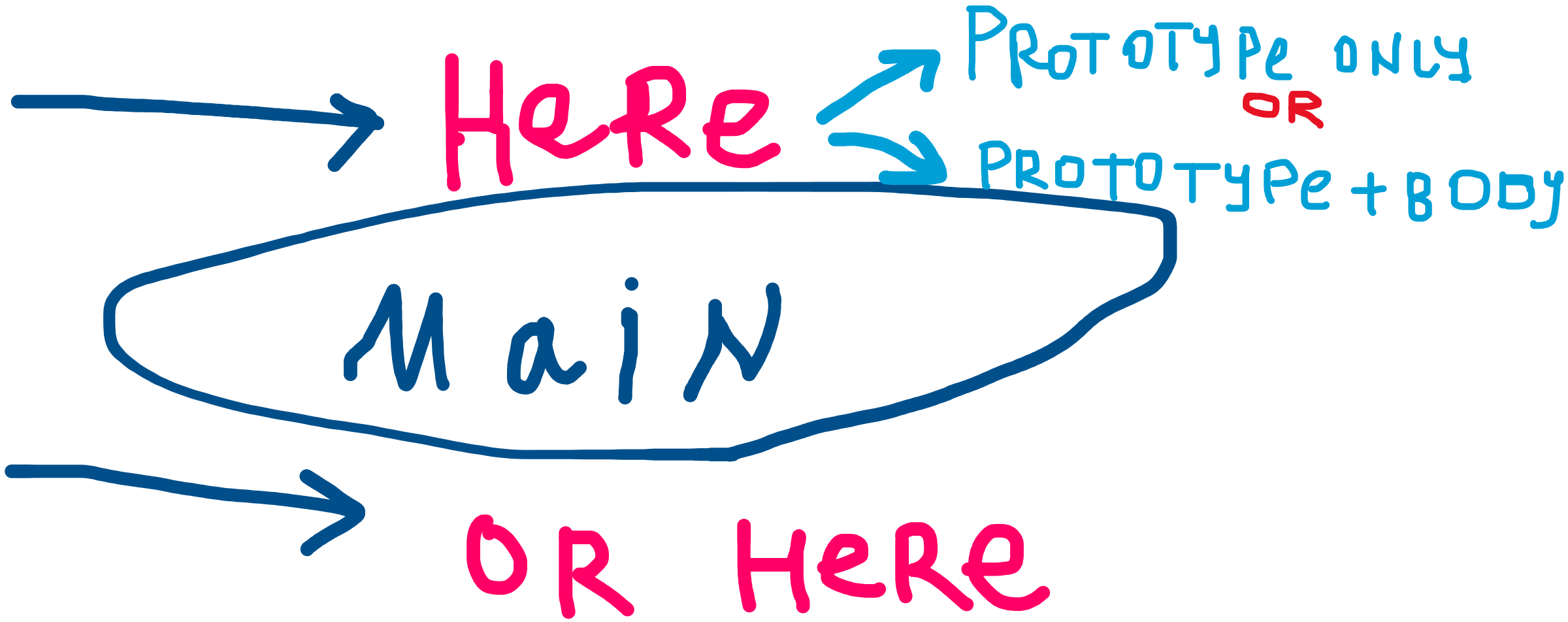
A function may return a value. The **return_type** is the data type of the value the function returns.

Some functions perform the desired operations without returning a value. In this case, the return_type is the keyword **void.**

Where to declare the function?

1. **Always put function prototype BEFORE the main function**(otherwise you will not be able to use it in your code).
2. The body of the function can follow the prototype **OR** can be placed after the main function.

Where to declare the function?



Submission

1. Go to WinSCP and copy your files from the CSE machine on your computer.
2. If you want, show me execution of your programs (to be sure that there is no problems).
3. Submit Lab8A.cpp, Lab8B.cpp, Lab8C.cpp on Canvas.