Lab7: C-Strings & Functions

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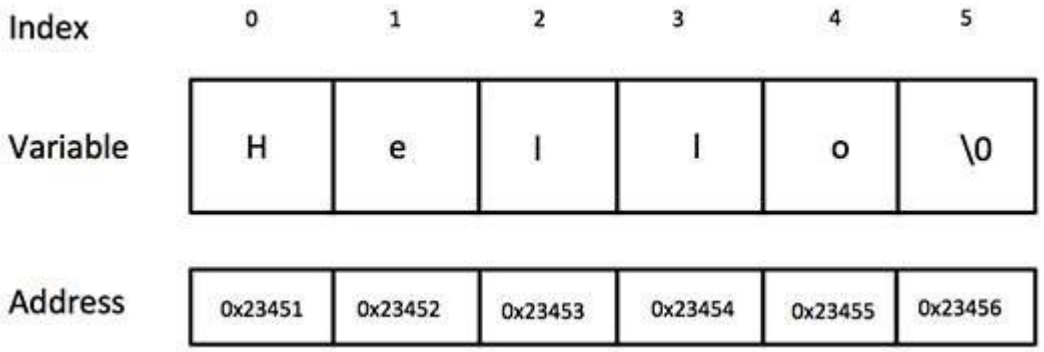
TA Polina Nemkova

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)

Don’t forget to add a library to use cstrings

```
#include <cstring>
```

Function declaration

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

Return Type

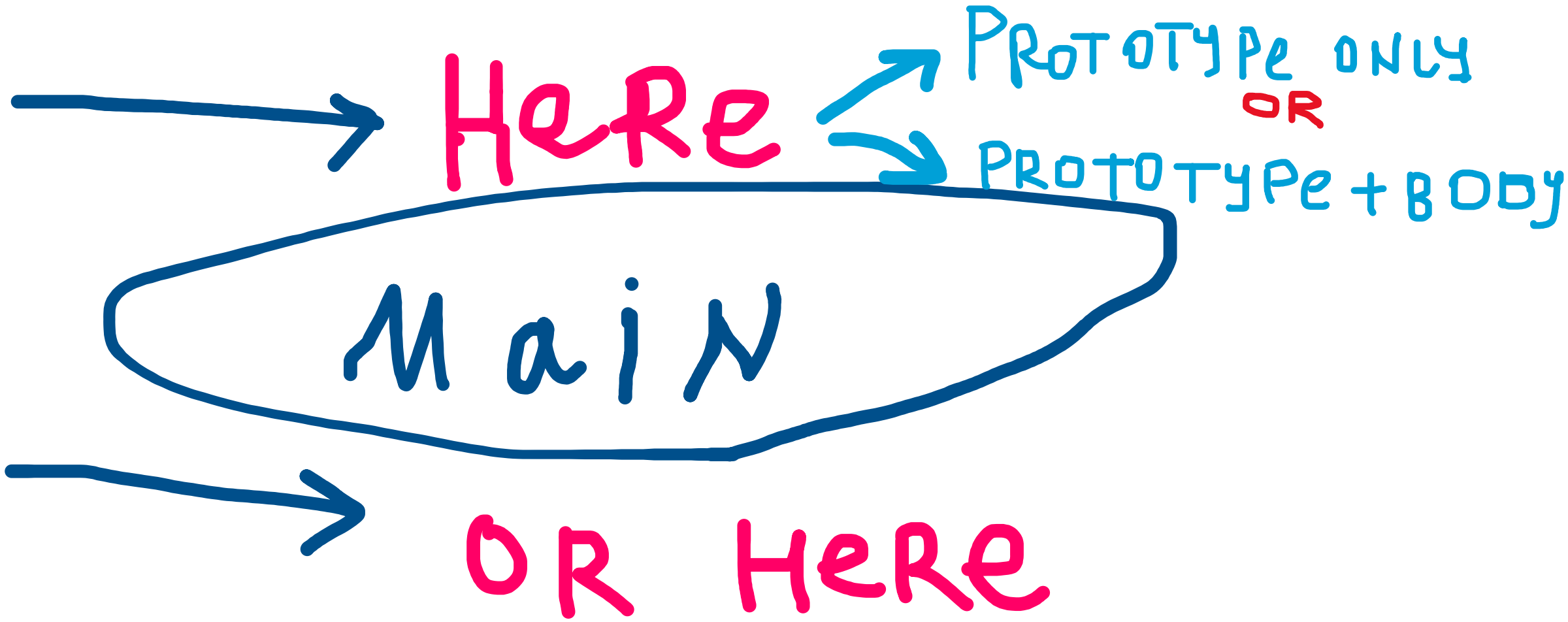
A function may return a value. The **return_type** is the data type of the value the function returns.

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?



```
#include<iostream>
#include <cstring>


int main()
{
cout <<“Bonjour world!”<<endl;
return 0;
}
```