Lab #04

Date: 2014/03/12

Slide

- http://goo.gl/hQidlB

String

- C strings are character arrays
  - `char array[11]`

I	a	m	a	s	t	r	i	n	g	\0

- You can input a string by cin or the functions provided in <cstring>

<iostream>, <fstream>

- cin.get()
- cin.getline()
- much more… you can find them in
- http://www.cplusplus.com/reference/iostream/
- http://www.cplusplus.com/reference/cstring/

Do the practice directly!

- Go for Lab14-04

Something might be useful

- #include <cmath>
  - floor(2.75) = 2
  - pow(x, 5) = x^5

- After compute the equation, you need to do type conversion by: `M = static_cast<int> result;`

- You can compare and shift a character by its ASCII.
  - ```
    char s = 'c';
    s += 1;              //s = 'd'
    if (s == 100) cout << "true";
    //true, A==65, Z==90, a==97, z==122
    ```
    ```

Functions

- Functions "Encapsulate" a task (they combine many instructions into a single line of code)

- What is it used for ?
  - Easier to debug and reuse
  - Make your code more readable

Example

```
int add (int a, int b)
{
	return a + b;
}

int main()
{
	cout << add(1, 2) << endl; //output 3
	return 0;
}
```

declare? define?

- Remind how to create an integer variable
  - declare by giving type and name: `int a;`
  - if needed (but strongly recommend), initialize them.
  - define its value: `a = 10;`

declare? define?

- Similar to function
  - declare a function : `int add(int, int);`
  - define the function:

```
int add(int num1, int num2){
  return num1 + num2;
}
```

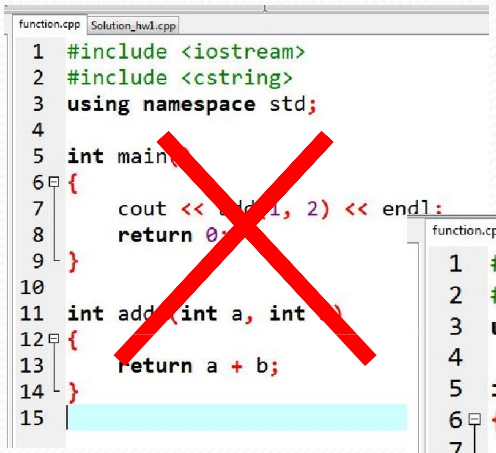
- Or you can just declare and define togetger!

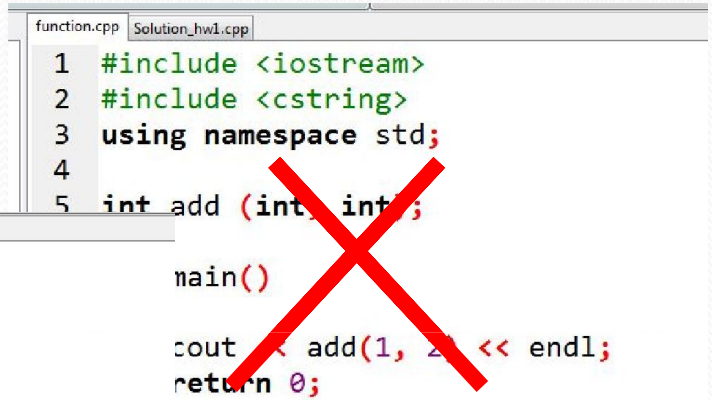
When to declare a function?

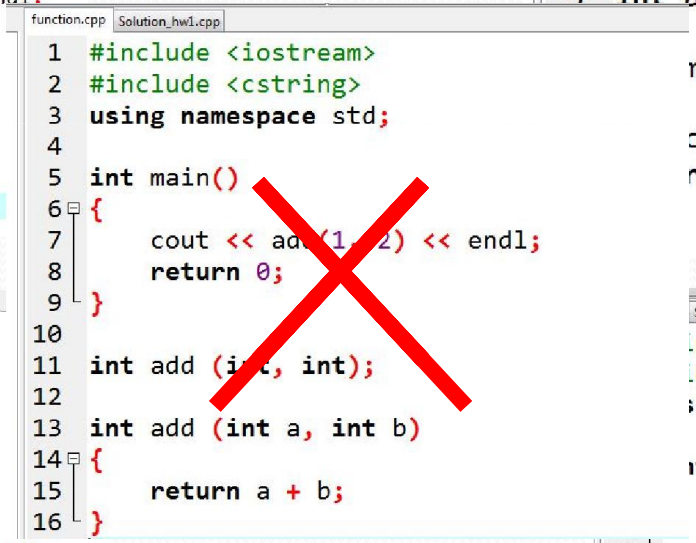
- You MUST declare a function before (the line) you use it

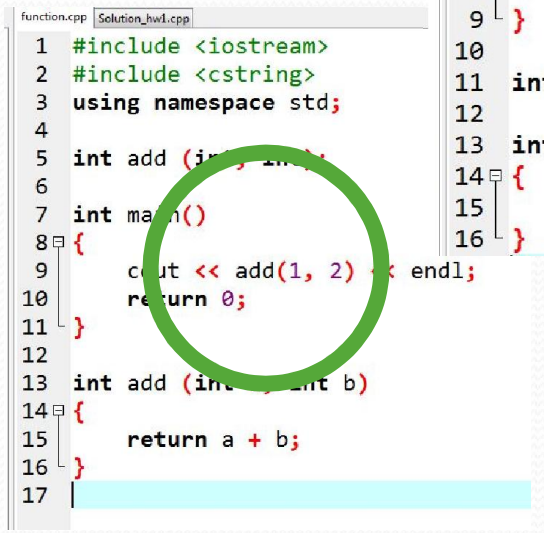
- Then you can define the function even after (the line) you call the function

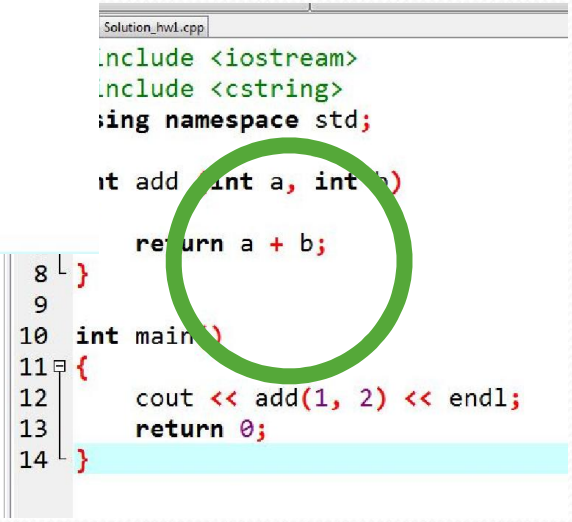
When to declare a function?











Any Question?