CS1580 Lab 07

Objective

This lab is to make you familiar with concepts of pass-by-reference in functions, function documentation and function overloading.

Assignment

Write two functions with the same name (Function Overloading). It will take 3 arguments and swap the largest of three int arguments or three float arguments with the first argument. In simple words, the functions should find the largest of the three arguments and place it in the first argument. Also, write a function that prints out the greeting messages. Document those three functions properly. Remember, you need to use pass by reference in this program.

While taking inputs, you don't have to validate inputs in this assignment.

Sample output:

```
**************Welcome**************

Enter the 1st integer :3
Enter the 2nd integer :2
Enter the 3rd integer :4

After swap, num1 will have the largest of the three values:
value in num1 is 4

Enter the 1st float :11.1
Enter 2nd float :22.2
Enter 3rd float :33.3

After swap, float1 will have the largest of the three values:
value in float1 is: 33.3
```

Logical Outline:

```
#include<iostream>
using namespace std;

//function prototypes

//description:
//pre:
//post:
void greeting();

//description:
//pre:
//post:
void findLargest(//pass the 3 ints by reference);

//description:
//pre:
//post:
void findLargest(//pass the 3 floats by reference);
int main()
{
      //declare 3 ints
      //declare 3 floats
      //call greeting();

      //prompt the user to enter 3 ints

      //Pass the 3 ints to the function by reference

      cout<<"After swap, num1 will have the largest of the three
values:"<<endl;
      cout<<"value in num1 is "<<num1<<endl;

      // prompt the user to enter 3 floats

      //Pass the 3 floats to the function by reference

cout<<"After swap, float1 will have the largest of the three
values:"<<endl;
      cout<<"value in float1 is: "<<float1<<endl;
```

```
	return 0;
}

void greeting()
{
	//code
}

void findLargest(//int arguments)
{
	//code
}

void findLargest(//float arguments)
{
	//code
}
```

Grading Rubric:

- Properly formatted code header with Name, User name, Section, Instructor, Date, Assignment number and purpose (15 points)
- Proper declaration of variables and constants (if any) with descriptive names (20 points)
- Three Functions (30 points)
    - Greeting function should not take any arguments and should not return anything
    - Function overloading - Two functions with the same name but one should take integer arguments and the second one should take float arguments.
- Comments, indentation and spaces between each line of code (15 points)
- Correct output (10 points)
- While submitting, make sure that the first argument's (float1 and num1) value is not the largest of the three (10 points)