CIS 150 – Lab 1

Dr. Brahim Medjahed
Release date: 09/15/2014

The Lab Report should be uploaded to Canvas <u>BEFORE</u> 12:00pm on 09/22/2014

Question 1:

Use MS Visual Studio to create an empty C++ project, and assign "lab1question1" as your project name. Copy and paste the following code:

```
#include <iostream>
using namespace std;
int main()
{
        cout  << "Hello World!" << endl;
        system("pause");
        return 0;
}
```

Compile your project and fix any error during the compilation process. Run your project, and press Ctrl+Alt+PrtSc to grab a screenshot as an evidence of executing your project.

Answer the following questions:

   a. Is the first line of the program (*#include <iostream>*) necessary? Why? What happens if you comment out this line?
   b. What is the line *system("pause")* useful for? What happens if you comment out this line?

Question 2:

Create a new project. Copy and paste the program in slides 53, 54, 55 (chapter 2). Compile your project and fix any error during the compilation process. The run the program for few test cases (at least 4 test cases) and fill out the following software testing table:

Reason for Test Case	Input Values	Expected Output	Observed Output

For each test case, press Ctrl+Alt+PrtSc to grab the corresponding screenshot.

Question 3:

The following program prompts the user for two integers and displays the sum of the two integers. Complete the missing statements/lines.

Compile your project and fix any error during the compilation process. Run your project, and press Ctrl+Alt+PrtSc to grab a screenshot as an evidence of executing your project.

```
…………………..          // put her comments that give information about the program
…………………….          // put here the compiler directive for iostream
using namespace std;
int main()
{
        …………………….          // declare three variables x, y, and z of type in

        …………………….          // display a message using cout asking the user to enter a first integer
        ……………………...         // use cin to prompt the user for a value for x

        …………………….          // display a message using cout asking the user to enter a second
                               // integer
        ……………………...         // use cin to prompt the user for a value for y

        …………………….          // write a statement that assign x + y to z

        …………………….          // display a message using cout displaying the message
                               // The sum of the two integers is : put the content of z here


        system("pause");
        return 0;
}
```

Submission of Your Work

You need to prepare ONE SINGLE MS word document (with the name *YourLastName_Lab1*) that contains:

- For question 1: include a screenshot of the execution. In addition, copy and paste the source code. Also provide answers to questions a and b.
- For question 2: include screenshots of different test cases and fill out the software testing table given in page 1 of this document. In addition, copy and paste the source code.
- For question 3: include a screenshot of the execution. In addition, copy and paste the source code.

Your report should have a cover page, table of content, and nicely formatted sections.

Upload the file to Canvas (in the lab section) under Lab1 assignment.