CMPSCI 101 – Spring, 2015 – Shaffer – LAB 1g (Chapters 1 & 2)

Write a program that replicates the following examples. ***Do not change your program to make each example run!*** Make sure your program has all of the features of a good program that you know so far. Recreate the following output (underlined sections are user input):

$c = \sqrt{a^2 + b^2}$	←This is the calculation for the hypotenuse of a triangle – **But don't panic!** The program shows you the calculations each step of the way!

```
Let's calculate the hypotenuse of a right triangle!
Enter a double (float) between 1 and 20: 33.3
Now, enter another double (float) between 1 and 20: 44.4
33.3 squared is 1108.89
44.4 squared is 1971.36
The total is: 3080.25
So, the square root of the total is 55.5
```

```
Let's calculate the hypotenuse of a right triangle!
Enter a double (float) between 1 and 20: 22.2
Now, enter another double (float) between 1 and 20: 33.3
33.3 squared is 492.84
44.4 squared is 1108.89
The total is: 1601.73
So, the square root of the total is 40.0216
```

Include the following header (change the information to match your name, etc.) at the top of your program:

```
// CMPSC 101 Spring 2015
// ADAM APPLE ← Your name!
// Section n ← Your section!
// LAB 1g – CHAPTERS 1 & 2
```

Once you are certain that your program works, paste **ALL of the following (in this order) into a DOC file**:

(1) The **ENTIRE program *as text*!**
(2) **FIVE screen shots** of the program running; make sure two of them match the example above (except that any random number may be different!).

DO NOT USE ANY ASPECT OF C++ THAT IS NOT COVERED IN THIS COURSE AS OF THE TIME OF THE ASSESSMENT.

SUBMIT THE DOC (or DOCX) FILE TO THE ANGEL DROP BOX LABELED FOR THIS LAB VERSION.