A simple C++ Program

1) I will be using Atom as an editor.
   - Area and radius are user friendy and make the input file easier to understand.

2) ./area.x runs the file in the current directory
   When I added <<endl, nothing happened. I'm not sure why.
   I get ">" in the terminal

3) The errors are not noticed immediately because some of the code uses files that must be included at the top of code to be used later on.

4) a. I compared my answers to my calculator
   b. I checked to make sure the unit circle had area π

5) My volume.cpp worked correctly

6)

Command	C++ code	Python code
define π	const double pi = #	pi = #
area equation	double area = pi * radius * radius	area = pi * radius ** 2
show output	use "cout"	use "print"

Overflows, underflows

1) Output becomes a .out file in my PHY_905 directory and also goes into my terminal.

a. Single precision

underflow @

overflow @

b. double precision

underflow @

overflow @

Using a makefile

2) Yes, mine was successful

3) Also, a success

Using the GSL Scientific Lib.

1) Make sure they give the same output when $x = 5$

3) $J_0(3) = -0.260051954$

4) MATLAB

J = besselj(0,3)

J = -0.2601 ✓ success!

5) Didn't get to this