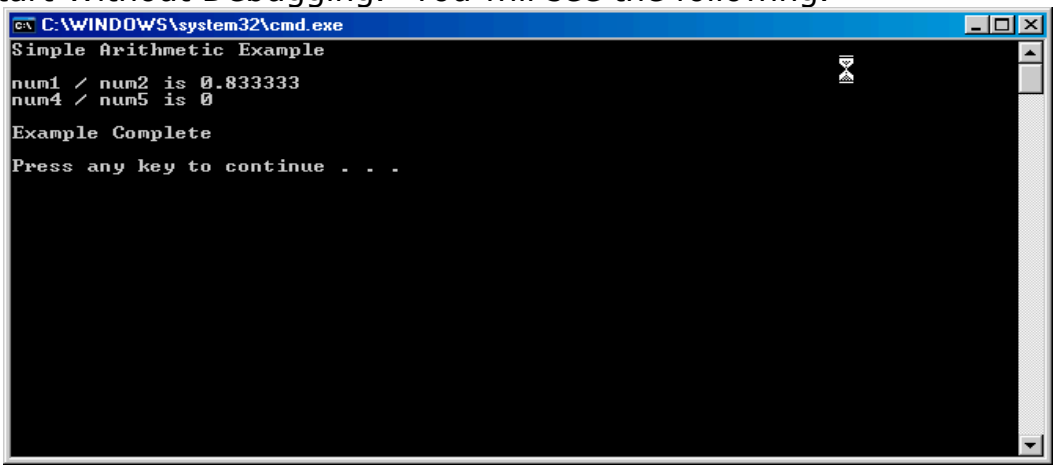
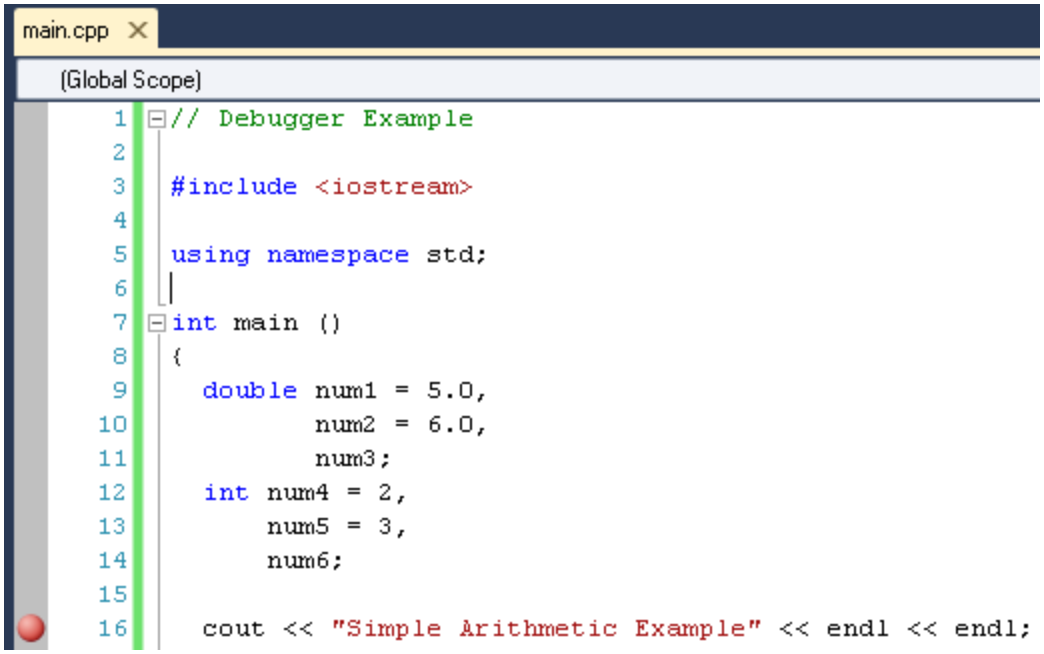
CS150 Debugger Example

We are going to begin using the Visual Studio 2010 debugger to aid with debugging programs.

1. Go to **CS150-02 Public** folder and drag a copy of the solution DebugEx to your desktop.
2. Build your solution and then execute the program using the command "Start Without Debugging." You will see the following.

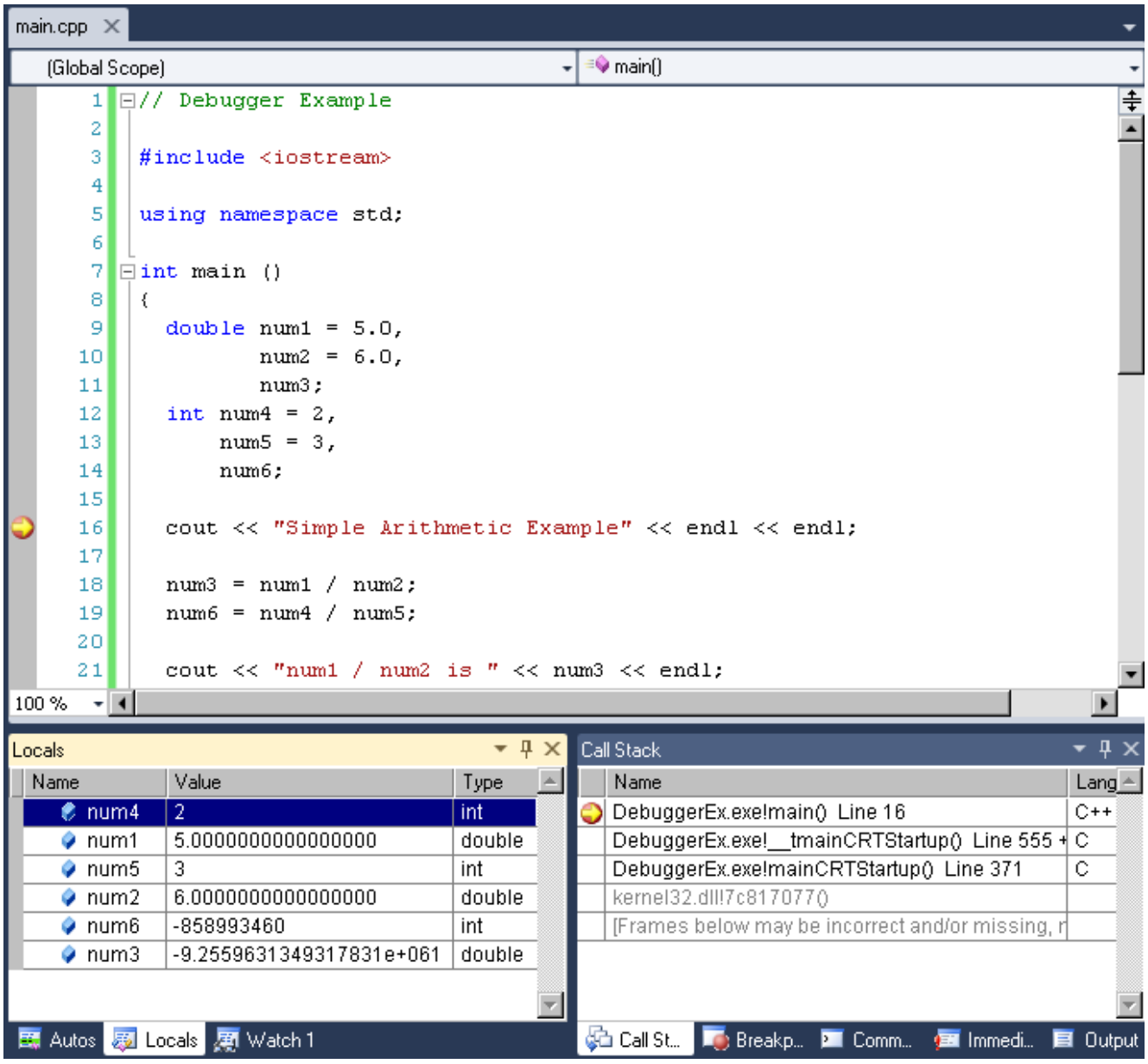


3. In looking at your output you wonder why num4 / num5 is 0 since both numbers are nonzero. What is going on?
4. Set a breakpoint by clicking an executable statement in the light blue column as follows. Notice the red button next to the executable statement cout.



5. Let's start the debugger and step through our program an executable statement at a time. Start the debugger by going to Debug ☐ Start Debugging. The debugger will stop at the first executable statement that has a breakpoint. Your screen should look something like the following.

Make sure the Locals tab is selected and not the Autos tab.



6. **<u>Show your instructor/TA the above screen.</u>**
7. Let's talk about what we are looking at.
8. From here we can continue running the program until the next breakpoint by selecting Resume as shown below.
9. You can also just execute the next statement by selecting Step Over.
10. We will talk about Step Into and Step Out when we get to functions.
11. Execute each statement up to but not including the return statement.
12. **<u>Show your instructor/TA</u>**