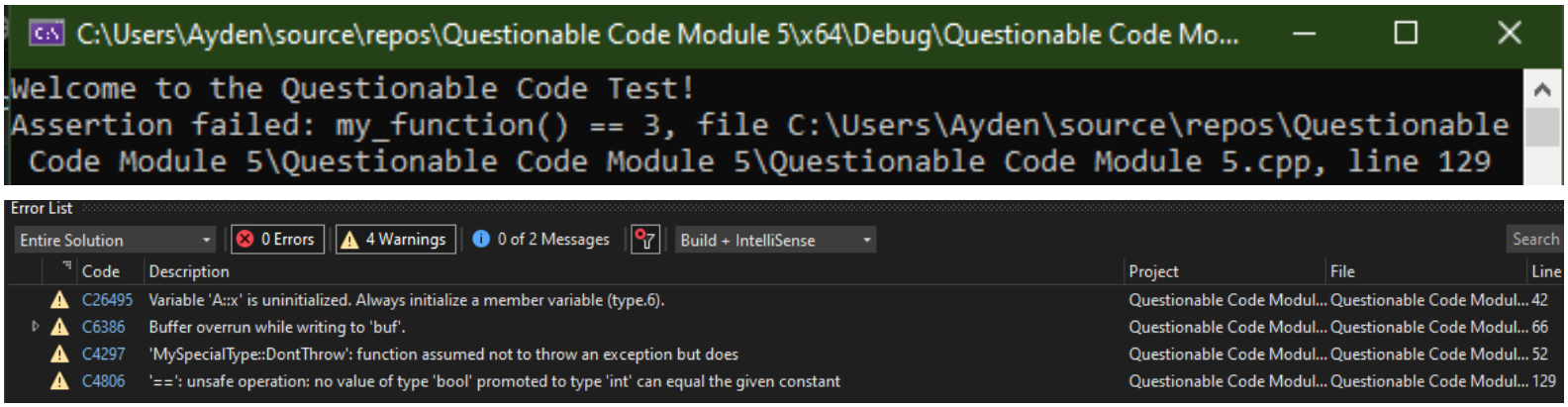
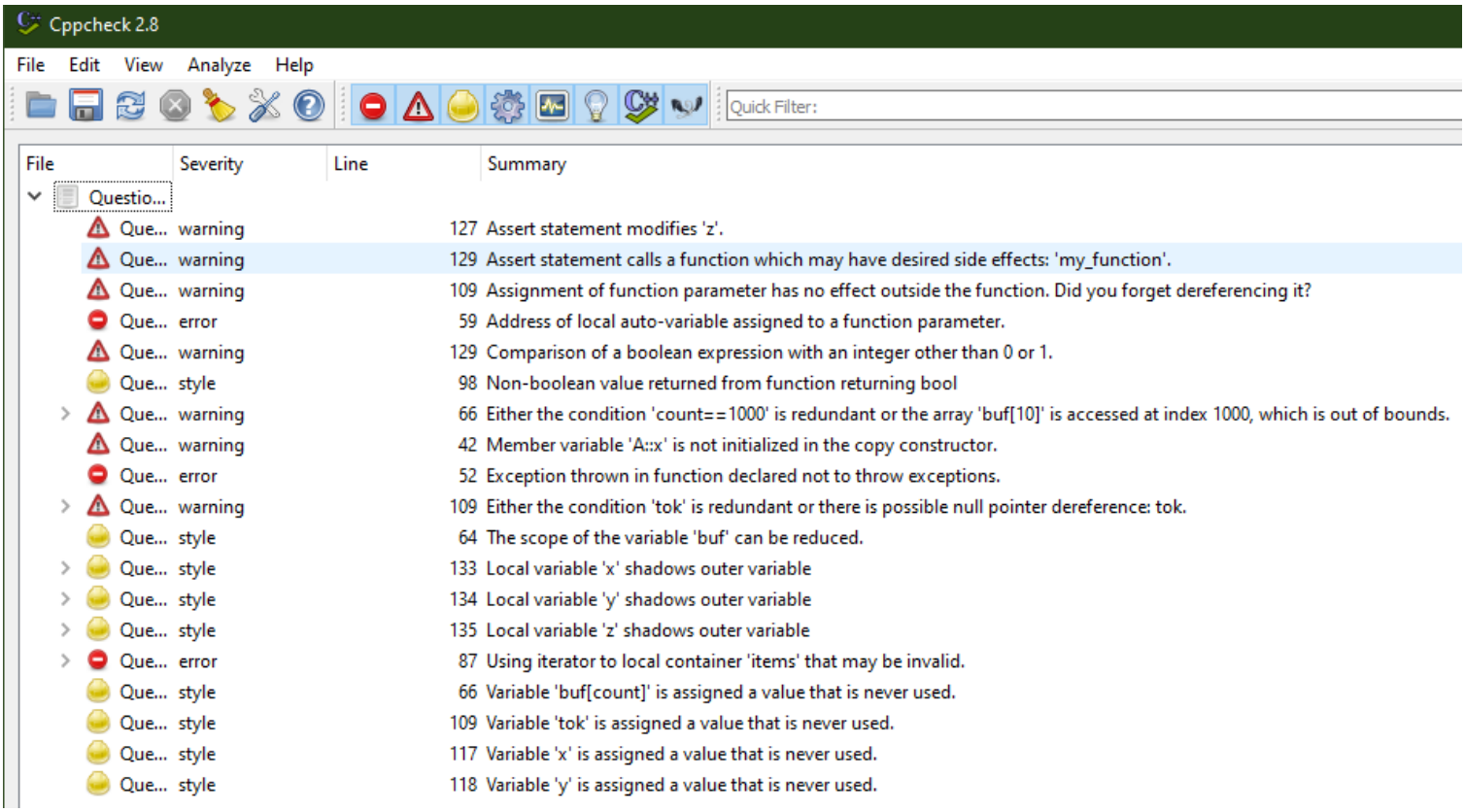
Visual Studio gave the following error when the Questionable Code was run, saying that an assertion has failed. Without running an analysis of the code through Visual Studio, but just having the code opened in Visual Studio, the first two of the four errors appeared (in the second screenshot). However, when you run an analysis of the code through Visual Studio, the second half of errors on the second screenshot appears.



In contrast, below you will see the results from CPP Check, which truly speak for themselves. It does a significantly better job of finding all sorts of different errors throughout the code, unlike Visual Studio which has a much more cursory overview of the errors and lacks most.



Between the two services, it is obvious which is superior -- Cppcheck. CPPcheck uncovered 19 issues, while Visual Studio uncovered 2 issues by default and 4 when the built-in code analysis was run. Visual Studio is practically nothing in comparison to Cppcheck when it comes to checking static code, however, those small warnings that you receive through Visual Studio can clue you into the fact that you may have more errors if you actually run it through Cppcheck. These errors let you know when you are coding that there is something wrong and you should probably address it.

Overall, the process of gathering this data was not complex. For Visual Studio, errors are already shown on the bottom without having to do anything, however you can uncover more errors by attempting to launch the code or by running the built-in code analysis tool that Visual Studio has. For Cppcheck, all you have to do is simply link the cpp file to Cppcheck and it returns the results instantly. Additionally, you can print off the results to an XML file for easier reading or other purposes, which is a handy feature.