HW 05 - Static Code Analysis

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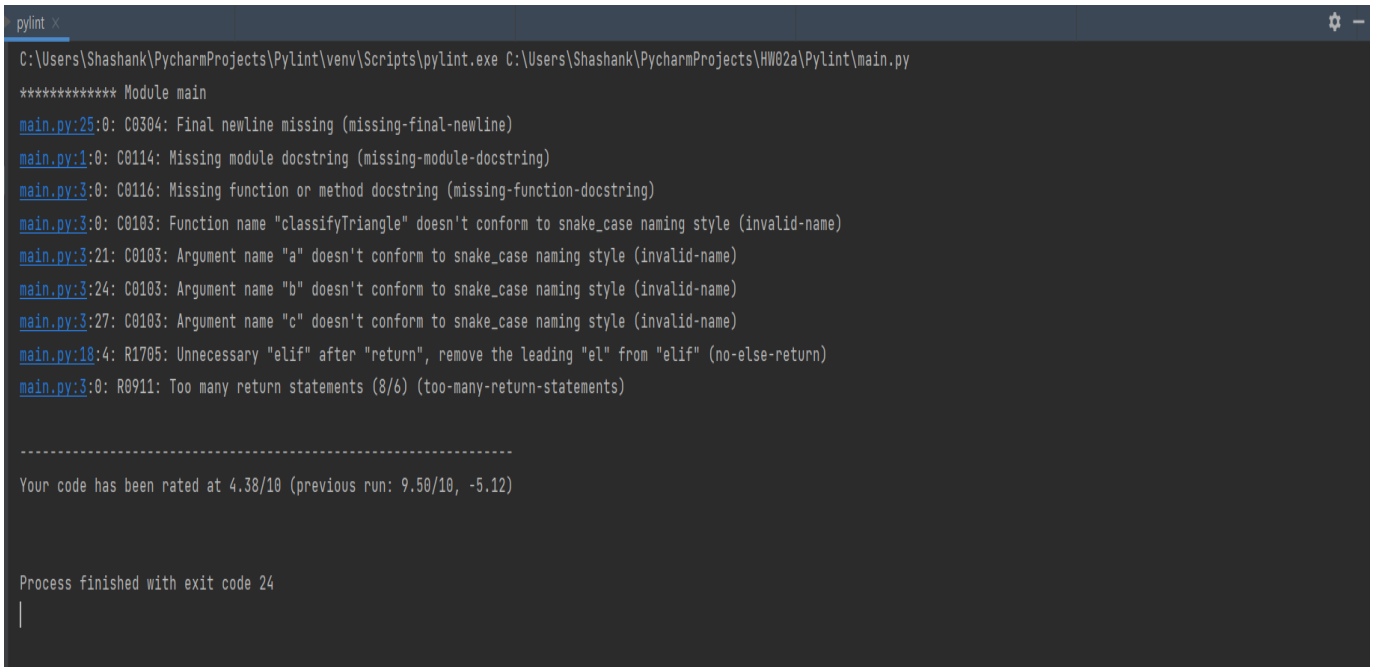
Summary: The code is changed to make it more legible and executable by eliminating any extraneous indentation, spaces, and variable renaming after the code analyzer was performed on the original program. Once this was finished, the static value was full. Hence, 99% coverage is guaranteed.

1. **The GitHub URL containing the code that was analyzed**
URL: https://github.com/RK-ops/HW-05_Static-Code-Analysis/tree/main

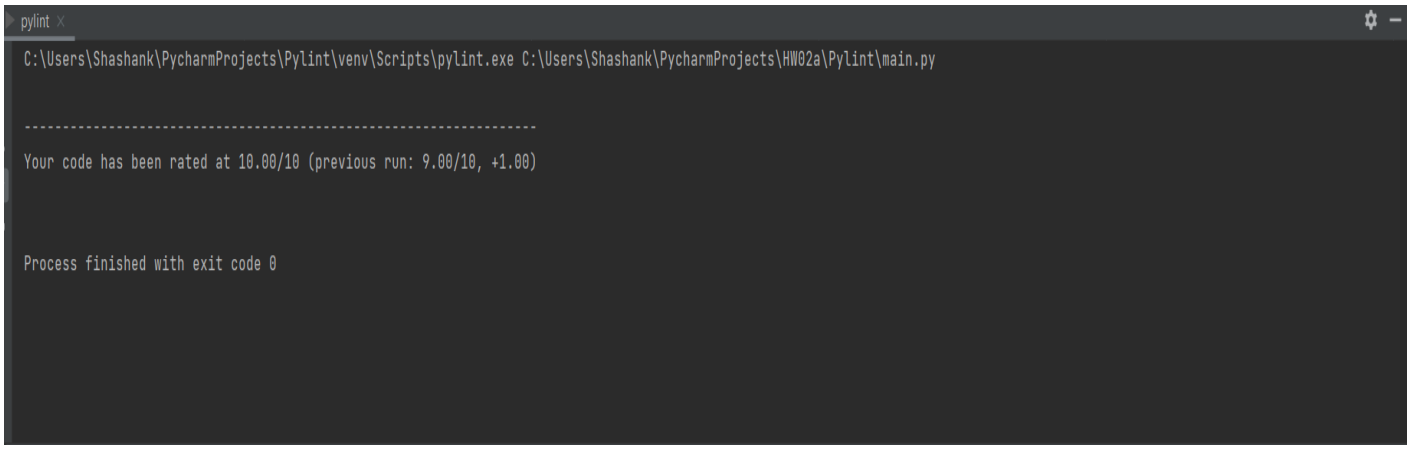
2. **The name and output of the static code analyzer tool you used**:

The tool used for the static code analyzer is Pylint.

Initial Output (Before making the changes to the code)



Final output : After the changes have been made.



3. The name and output of the code coverage tool you used : The tool used is coverage.py

Initial: The initial coverage was 46%.

Module ↑	statements	missing	excluded	coverage
TestTriangle.py	54	25	0	54%
triangle.py	16	13	0	19%
Total	**70**	**38**	**0**	**46%**

Final : The final coverage is 99%, covering all the test cases.

Module ↑	statements	missing	excluded	coverage
testtriangle.py	57	0	0	100%
triangle_updated.py	21	1	0	95%
Total	**78**	**1**	**0**	**99%**

4. **Identify both your original test cases and new test cases that you created to achieve at least 80% code coverage.**

Our initial request included the requirement that the code be 100% efficient, so we modified our code to that level and posted it as soon as we were able to run the test cases against the new code and obtain coverage of more than 80%. A 99% efficiency was attained. There was no need to develop more test cases after I thoroughly evaluated the program with the Assignment's several test cases. Making the necessary code correction and posting that everything was operating as intended worked for me.

5. Attach screenshots of the output of the static code analyzer as well as code coverage. You should show a screenshot of the analysis results both before and after any changes that you make to your programs:

I have attached the screenshot of the static code analysis and code coverage above before and after already above. Also uploaded the new versions of the code to the git URL as per requirements.