My coding standard:

Naming conventions:

Public variables, methods, classes, Enum, properties: starts with PascalCasing.

Private/protected variables, parameters: starts with camel Casing.

Methods/class: must have easy readable identifier names, do not use acronyms that is not widely used, use pascalcasing at start of every word, ex IdentifyTriangle()

Collections: use nouns in plural

Interface: starts with I in the name

Structure:

Setup of script:

1. Enum
2. Private fields
3. Protected fields
4. Public fields
5. Properties
6. Constructor
7. Virtual methods
8. Methods
9. Override methods
10. Events/exceptions

Hold the code as clean as possible and format it so it is easily readable, don´t have a lot of empty between line and remove uncomment code there is no longer needed.

Commenting:

Make a short and informal summary for every method.

Make comments to code that have a more complex logic or otherwise can be difficult for your peers to understand right away.

Make comment on code that follow some Theorem or otherwise is not common knowledge for your peers.

Divide and conquer:

Try to divide complex logic and code into several methods and class.

Reuse code as much as possible by separated reuse able functionality into smaller methods and place them in a classes or dll which then can be accessed from other classes or projects

Static Test Techniques Exercise:

Static Code Analysis of Triangle program:

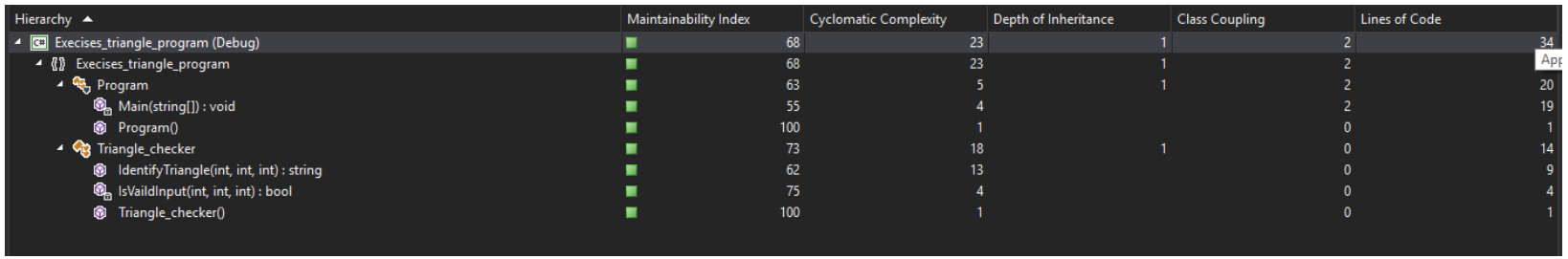
I can see that I mostly follow my coding standards; I have a class that is call Triangle_checker wise should be called TriangleChecker

I have used visual studios build in code metrics to analyze my project.

Result: see screenshot on next side.

The visual studio code metrics use the CC2 “Extended or strict cyclomatic complexity. It count if, each Boolean in if, each case in a switch and +1 for the methods.

I can see that my analyze of my program look mostly fine, but I can see that my IdentifyTriangle() has a cyclomatic complexity on 13 and since 12 is the limit for a good standard, after a closer look I could see that i could reduce the number of if statements, since there is some redundant if statement in the method.



Hierarchy	Maintainability Index	Cyclomatic Complexity	Depth of Inheritance	Class Coupling	Lines of Code
Execises_triangle_program (Debug)	68	23	1	2	34
Execises_triangle_program	68	23	1	2	
Program	63	5	1	2	20
Main(string[]) : void	55	4		2	19
Program()	100	1		0	1
Triangle_checker	73	18	1	0	14
IdentifyTriangle(int, int, int) : string	62	13		0	9
IsVaildInput(int, int, int) : bool	75	4		0	4
Triangle_checker()	100	1		0	1