Implement a 3D Vector class.

Classroom assignment: https://classroom.github.com/a/qlxLAY1j

Due before sun up 15/3/31

Implement all the functions required by a vector3.

A header file is included for you to start the project, you should comment out the bulk of the file and un-comment it line by line as you implement the required methods. You should run your own test code from the main program the expected result using the debugger.

If you right click on the definition and select "quick actions and refactoring" you can then select "Create definition of ..." and it will start off the method code for you. But the code will of course need to be completed.

```
30
                       MyVector3(sf::Vector2f t_sfVector);
        31
                       std::string toString();
        33
                       MyVector3 operat Quick Actions and Refactorings...
        34
                                                                                               const;
                                                     Generate Graph of Include Files
                      MyVector3 operat
MyVector3 operat
MyVector3 operat
Go To Definition
MyVector3 operat
Go To Declaration
        36
                                                                                              onst:
                                                                                              const;
                                                                                 Ctrl+F12
        38
                      MyVector3 operat Find All References

View Call Hierarchy
Toggle Header / Co.
        39
                                                                                 Ctrl+K, Ctrl+T
                                                                                 Ctrl+K, Ctrl+O
        41
                       bool operator ==
                            Run To Cursor
                                                                                Ctrl+F10
              MyVector3 operator + (const MyVector3 t_right) const;
on of 'operator 'in MyVector3.cpp r - (const MyVector3 t_right) const;
35 Create definition of
             r +(const MyVector3 t_right) const
r *(const double t_scalar) const;
r *(const double t_divisor) const;
r *(const double t_divisor) const;
r +=(const MyVector3 t_right);
MyVector3 operator -=(const MyVector3 t right):
36 Copy signature of 'operator+' to clipboard
38 Move Definition Location
            MyVector3 operator +(const MyVector3 t right) const;
       120
        121
                    MyVector3 MyVector3::operator+(const MyVector3 t_right) const
        122
        123
                                return MyVector3();
        124
        125
                    □/// <summary>
        126
```

You will normally need to run the test a few times with different values to ensure correctness, you should leave all these tests in the main method for Pete to look at.

Important you must include where you found the test value URL or book / page reference.

You will also need to add an appropriate amount of [quality] comments.

- Do not break your code base, if it doesn't compile then Zero grade.
- Do not change the definition of the methods then when I add my test code it won't compile and Zero Grade will result.
- Create a new commit point for every group of one, two or three methods (no more than three methods can be coded in a single commit. Pete will take marks off for this).

• Comments need to be added before the method is written and updated as soon as the method is finished. [Pete will take marks off for a last pass with comments]

There is no need for a research document as you all know how to perform these vector operations and if not you must arrive at the same conclusion as the Internet (good parts).

You should start your project by accepting this GitHub classroom link (make sure to be logged in first then paste link)