

We are passionate about unit testing, Test Driven Development (TDD), and writing clean production code and hope you are too.

Our goal is to see well tested clean-code. Please use C# or JavaScript and document any necessary frameworks/dependencies in some form of readme.

The gist of this exercise is to produce an interactive numerical calculator with some simple capabilities. Order of operations is one thing we require. Your program does not require a graphical user interface but needs to provide an interactive execution shell that could support the examples below (note that spaces should be ignored). Additionally we require that you implement the calculator using the Command design pattern https://en.wikipedia.org/wiki/Command_pattern.

We would like it to support the following operators,

- +, -, *, /, 1/x, and x!
- C - for clear previous number
- A - for all clear
- Q - for quit

Here are some examples of how we might use your program:

Calculation	Result
2+2= +5=	4 9
7 + 8 C + 7 =	14
-5*5/3=	-8.333333333333333
7 + - 6 =	1
-5 * 5 - 15 / 3 =	-30
5! / 12 A + 9 =	9
0.5 1/x * 2 =	4
Q	Program should quit

Please create a .zip containing the following to upload to the url provided at the bottom of the email containing this attachment:

- Source code
- Unit tests

- README.md