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# Calculator Refactor

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## Rules

1. Strictly practice TDD
  - a. Follow the: Red-Green-Refactor cycle
  - b. Stop and read your code before refactoring.
  - c. Be sure to run your test after each cycle
2. Practice wishful coding
  - a. Do not write any production code until you have a failing test.
  - b. Or compilation failures to drive the need to implement the method.

## The Kata

You are given a calculator application. However, the solution is not perfect. All logic sits in “action scripts” behind button clicks, there are no test and it does not always handle operations correctly. E.g  $1++2$  equals 3 instead of “Error”

The code for this kata can be found at <https://github.com/T-rav/Wpf-Calculator-Kata> <sup>1</sup>

Your job is to write unit tests for the code, refactoring the code to create testable units not left behind button clicks.

- Keep your check-ins small by limiting each one to a single refactoring.
- Should you find any bugs, fix them as you go by creating a failing test and then making it pass; then return to refactoring.

## Bonus

Avoid the use of if or switch statements in your final solution

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<sup>1</sup> Code sources from <https://code.msdn.microsoft.com/windowsdesktop/simple-calculator-d1d8cf4c>