

## STRING CALCULATOR KATA BY ROY OSHEROVE

## **REQUIREMENTS**

## Before you start:

- Try not to read ahead.
- Do one task at a time. The trick is to learn to work incrementally.
- Make sure you only test for correct inputs. There is no need to test for invalid inputs for this kata

## String Calculator

- 1. Create a simple String calculator with a method int Add (string numbers)
  - 1. The method can take 0, 1 or 2 numbers, and will return their sum (for an empty string it will return 0) for example "" or "1,2"
  - 2. Start with the simplest test case of an empty string and move to 1 and two numbers
  - 3. Remember to solve things as simply as possible so that you force yourself to write tests you did not think about
  - 4. Remember to refactor after each passing test
- 2. Allow the Add method to handle an unknown amount of numbers
- 3. Allow the Add method to handle new lines between numbers (instead of commas).
  - 1. the following input is ok: "1\n2,3" (will equal 6)
  - 2. the following input is NOT ok: "1,\n" (not need to prove it just clarifying)
- 4. Support different delimiters
  - 1. to change a delimiter, the beginning of the string will contain a separate line that looks like this: "//[delimiter]\n[numbers...]" for example "//;\n1;2" should return three where the default delimiter is ';' .
  - 2. the first line is optional. all existing scenarios should still be supported
- 5. Calling Add with a negative number will throw an exception "negatives not allowed" and the negative that was passed. if there are multiple negatives, show all of them in the exception message
- 6. Numbers bigger than 1000 should be ignored, so adding 2 + 1001 = 2
- 7. Delimiters can be of any length with the following format: "//[delimiter]\n" for example: "//[\*\*\*]\n1\*\*\*2\*\*\*3" should return 6
- 8. Allow multiple delimiters like this: "//[delim1][delim2]\n" for example "//[\*][%]\n1\*2%3" should return 6.