We will create a simple string calculator with the following signature:

fun add(numbers: String): Int

This is a TDD (test driven development) exercise. So please keep in mind: Test(s) first!

Any questions so far? ©

1. The method can take up to two numbers, separated by commas and will return their sum.

For example:

add("") should return 0

add("1") should return 1

add("1,2") should return 3

2. Allow the add method to handle an unknown amount of numbers.

For example:

add("1,2,3,4,5,6") should return 21

3. Allow the add method to handle new lines between numbers.

For example:

add(" $1\n2,3$ ") should return 6

You do not need to cover something like: "1,\n2,3"

4. Support different single character delimiters which will be given in the following format:

"//delimiter\nnumbers"

For example:

 $add("//*\n1,2\n3*4")$ should return 10

add("//]\n1\n2]3") should return 6

5. Calling add with a negative number will throw an exception "negatives not allowed" plus the negative that was passed. If there are multiple negatives, show all of them in the exception message.

For example:

add("-3,-8") should throw Exception("negatives not allowed: -3, -8")

6. Numbers bigger than 1000 should be ignored. For example:

add("2,1001") should return 2

7. Delimiters can be of any length with the following format: "//[delimiter]\nnumbers"

For example:

add("//[***]\n1***2,3") should return 6

add("//[Hello]\n1,2Hello3") should return 6

8. You can have multiple delimiters: "//[delimiter1][delimiter2]\nnumbers"

For example:

add("//[*][%]\n1*2,3%4") should return 10

8. Make sure you can also handle multiple delimiters with length longer than one char:

"//[delimiter1][delimiter2]\nnumbers"

For example:

add("//[***][%%%]\n1***2,3%%%4") should return 10