

## Design plan

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Assignment 0

### **Problem 1 : Describe a test plan for the various implementations of calc.**

When formulating a test plan for the 'calc' program, my primary consideration revolves around addressing various scenarios inherent to the program's specifications. It has come to my attention that the existing "basic addition.sh" fails to encompass certain cases. Notably, scenarios involving non-integer inputs are unaccounted for. I proposed a test where non-integer arguments are supplied, prompting the program to print "BAD INPUT" and return a non-zero value in the console. Another overlooked scenario pertains to the program's failure to validate input integers within a defined range. A test is imperative for cases surpassing this range, causing the program to execute "TOO BIG" and return a non-zero value. Additionally, testing for cases where there are fewer than two arguments is crucial. This test would prompt the program to output "NOT ENOUGH INPUT" when the console returns a non-zero value.

### **Problem 2 :**

From the calc program we do not really know how it works when the user gives more than the two given Arguments, which is when it gives us an error message. So a new test would have to be designed to determine the program's response to extra arguments. Specifically, the test should verify whether the program prints an error message, resulting in a non-zero value. Another case to consider is if the program ignores extra arguments and still provides accurate output. Lastly, it is essential to test if the program correctly processes and displays the total when provided with three or more arguments. These tests collectively aim to enhance the reliability of the 'calc' program.

Yes the shell scripts should check what the program does when given more than two arguments! I think Brad needs some programmers.