calculator.py

This program is a simple calculator that performs addition, subtraction, multiplication, and division on two numbers. This has 5 functions; add, sub, mul, div and calculator. The first 4 functions take 2 parameters; a and b, and return the result of corresponding arithmetic operation. The calculator function is the main function of this program. The main function will ask for two inputs and choose one of the mathematical operators. Then we have if statements to go through desired calculations based on which operator the user wanted to use and it will print out the result.

- KISS: Each function does one thing
- DRY: No repeated code
- SINGLE RESPONSIBILITY: functions handle one task
- DOCUMENTED CODE: Well commented explanation of each function

calculatorV2.py

This program has only the main function. Inside the main function, the program asks users for 2 numbers and choice of operations. Then if and elif statements to calculate and print out the numbers.

Violations

- KISS: Hard to read and maintain as everything is inside one function
- DRY: Used multiple print() lines
- SINGLE RESPONSIBILITY: the function does multiple things like calculation, take input and print output at once.
- LACK OF DOCUMENTATION: No comments explaining the code.