

Lab 3 algorithm design

In this program, I used the concepts learned in week 2 and week 3 to create a simple calculator with the main purpose of executing basic mathematical functions such as addition, subtraction, multiplication and division.

1. A block comment to paste the rubric of the project, which is more efficient so I don't have to go back to the assignment tab to check the requirements. It also serves as a checklist to make sure I have everything in place.
2. Write a header for the file, name it mathematical calculator
3. Define my global variables. I will assign letters A, B, C, D to the numbers 1, 2, 3, 4. So the first few lines would look like this (A=1, B=2, C=3, D=4)
4. Define my user variables
 - a) Addition: the function name will be adding_numbers(x, y) and then define that function as $\text{add_num} = x + y$, return this value
 - b) Subtraction: the function name will be subtracting_numbers(x, y) and then define that function as $\text{subtracting_num} = x - y$, return this value
 - c) Multiplication: the function name will be multiplying_numbers(x,y) then define that function as $\text{multiply_num} = x * y$, return this value
 - d) Division: the function name will be dividing_numbers(x,y) then define that function as $\text{divide_num} = x / y$, return this value
5. I wrap around my print functions with a new function “output”, which satisfies the requirement of calling a function within another function.
6. I called the function output, which prints all my results in complete sentences. I integrated the text with the values passed through my arguments with a string bracket wrapped around the called user functions and randomly input two arguments for each function called.