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Creating Python Programs: Critical Thinking #1

In the first part of this project, I developed a Python program that finds the addition and subtraction of two numbers that are entered by the user. Similarly, the second part the program performs multiplication and division on two user-input numbers as well. In the following report I will present the Python program and discuss some challenges I faced during the development. I will also provide context into how the program is used and some other ways to use it.

In Part 1 I used Python’s ‘input()’ function to prompt the user to input two numbers (num1 and num2). This function allows the user to add an input to store as a variable in the program. Then the program adds and subtracts the stored variables and provides the results as output. In Part 2 the program also prompts the user to input two numbers using the input function, however, this time multiplies and divides the two inputs and gives the results as the output.

**Source Code:**

num1 = int(input("Enter a number: "))  
num2 = int(input("Enter another number: "))  
  
print(num1 + num2)  
print(num1 - num2)  
  
  
num1 = int(input("Enter a number: "))  
num2 = int(input("Enter another number: "))  
print(num1 \* num2)  
print(num1 / num2)

**Enter a number: 10**

**Enter another number: 5**

**15**

**5**

**Enter a number: 20**

**Enter another number: 4**

**80**

**5.0**

In the code you can see that the input() function is used along with ‘int()’ meaning integer function directly in front of it. This is because “the result from input() is always a string, so it may need a conversion like int() to convert it to a number” (Stanford University, n.d.). In the source code example above the int() conversion is directly in front of the input() function to convert the output to a number.

This was also one of the challenges I faced with this project: Where to put the int() in respect to the input() to get the output to convert to an integer and prompt the user to input a value. This is my first-time programming in Python as well and feel like I have gained so much knowledge from this assignment and in the first week of the course already!

**References**

Stanford University. (n.d.). The Python function input(). Stanford University. Retrieved May 19, 2024, from <https://cs.stanford.edu/people/nick/py/python-input.html>