Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Consider the program below to answer the following questions.
   1. List the name of the variables and their types
   2. Write the exact output of this program, if we run it

val1 = 100

val2 = 50.0

val3 = val1/val2

msg1 = "Division"

val4 = val1 + val2

msg2 = 'Addition'

print(msg1 + " of ", val1, " and ", val2, ' = ', val3)

print(msg2, " of ", val1, " and ", val2, ' = ', val4)

Output:

1. If we change the following assignment “val2 = 50.0” to “val2 = 50”, what would be the outputs? Are they the same of different from question 1? Explain.
2. Consider the program below to answer the following questions.
   1. List the name of the functions and how many parameters each function has
   2. Explain what each function is doing
   3. Print the exact output if we run this program providing the following inputs: 10, 2, -
   4. Is the instruction print(firstNumber, "-", secondNumber,"=", subtractNumbers(firstNumber,secondNumber))valid/correct? Explain.

def addNumbers(num1, num2):

print(num1, "+", num2,"=",num1+num2)

def subtractNumbers(num1, num2):

return num1 - num2

def main():

firstNumber = int(input("Enter a number between 1 and 10: "))

secondNumber = int(input("Enter another number between 1 and 10: "))

operator = input("Enter a + to add or a - to subtract: ")

if operator == "+":

addNumbers(firstNumber,secondNumber)

elif operator == "-":

sub = subtractNumbers(firstNumber,secondNumber)

print(firstNumber, "-", secondNumber,"=",sub)

else:

print("Invalid operator!")

######call to main program #######

main()

print("Done!")