Let’s write another program that will act as a calculator. There should be a menu that asks whether the user wants to multiply two numbers together, add two numbers together, divide one number by another, or subtract one number from another. The result should be displayed on the screen and the program will run until the user indicates that they want to quit.

**Program – Version #1 – Algorithm**

**Program – Version #2 – Python Code**

print("Welcome to the Calculator Program")

print(" ")

print("Your options are:")

print(" ")

print("1) Addition")

print("2) Subtraction")

print("3) Multiplication")

print("4) Division")

print("5) Quit Calculator")

print(" ")

choice = int(input("Choose your option: "))

while choice != 5:

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

if choice == 1:

print("The answer is: ", num1 + num2)

elif choice == 2:

print("The answer is: ", num1 - num2)

elif choice == 3:

print("The answer is: ", num1 \* num2)

elif choice == 4:

print("The answer is: ", num1 / num2)

print(" ")

print("Your options are: ")

print(" ")

print("1) Addition")

print("2) Subtraction")

print("3) Multiplication")

print("4) Division")

print("5) Quit Calculator")

print(" ")

choice = int(input("Choose your option: "))

print("Thank-you for using our calculator!")

* Print opening message
* Print the options (Add, Subtract,   
  Multiply, Divide and Quit)

* Get the menu option

* While the user doesn’t want to quit

- Get and error check two numbers

- If the option is 1, add

- If the option is 2, subtract

- If the option is 3, multiply

- If the option is 4, divide

- Print the options (Add, Subtract,   
 Multiply, Divide and Quit)

- Get the next menu option

* Print goodbye message

**You are going to write Version #3 of this program using functions.**

a) Write the following functions:

#Prints the menu and returns the user’s option

get\_option()

#Returns and error checks two numbers entered by the user

get\_input()

b) Rewrite the Calculator program using these two functions.

c) Why do this? What is the real benefit of using these functions?