C++ Project 1

The Logic for creating a program that takes the input of 3 values and then calculates the total and average.
What is the real math?

• To find the total, you simple add the 3 values together

• To determine the average, you add the 3 values together and then divide by the number of values....or in other words, divide by three.
Step 1 – Setting up the program

• Create your variables
  – You will need a variable for each of the three numbers
  – You will need a variable to hold the total of the 3 numbers
  – You will need a constant to represent the divisor
  – You will need a string variable to help personalize the program
Step 2 – Begin the program

• Use a cout statement to prompt the user for their name.
• Store their name in the string variable by using the cin statement and point it to the string variable
• Next, create another cout statement offering some instructions
Step 3 – The heart of the program

- Using cout and cin statements, prompt the user with the cout for a number, and immediately follow it with a cin for each instance, storing the numbers into the variables until all three contain values.
Step 4 – The Math

• Add the 3 variables together and store the result in the variable representing the total using a statement indicating that the variable name representing the total is equal to var1 + var2 + var3
Step 5 – The Final Output

• Create a cout statement utilizing the string variable containing the user’s name to personalize the output message.

• Your output values need to be the total and the average of the 3 numbers
How to display the contents of a variable

• To display the content of a variable, i.e. the total, simply use a cout statement and call the variable.
  – Cout<<total

• To display the average, again, use a cout statement, but encase the math inside of parenthesis. Take the total and divide by the constant. Cout << (total/constant)
Conclusions

• I never used any values, but only called the variables which contained the values.
• Calling a variable containing a number is the same as using the number.
• i.e. if var1 = 3 and var2 = 2,
  — then var1 + var2 = 5
  — Just as 3 + 2 = 5