CIS 121 Introduction to Programming

Lab 3

1. Allow the user to enter a quantity that represents the number of widgets a machine can produce per hour. The user will also enter the total number of widgets that need to be made. Write a function that receives the widgets per hour and total widgets and returns the number of hours needed to make all the widgets.
2. The user will enter the length, height and width of a room as well as the number of doors and windows. You are to write a function that determines the gallons of paint needed to paint the room. First calculate the total square footage as 2 \* length \* height + 2\* width \* height. Subtract 3 square feet for each door and window. Then divide the new total by 60 square feet assuming you will paint each wall twice. Return the number of gallons needed.
3. A baseball player enters the hits he made as well as the total at bats. Write a function to compute his batting average (hits / total at bats). Display his average.
4. Allow a user to enter the base and height of a right triangle. Write a function to compute the hypotenuse. (hy = SQRT(b\*b + h\*h)).
5. It takes 2500 steps to lose 1 ounce of fat. Allow the user to enter the number of steps they walked and display the pounds they lost (total steps / 2500). Use a function to compute this.