**Lab2 (10pts)**

Write an algorithm for the problem below (DO NOT WRITE A PROGRAM).

The credit plan at a TidBit Computer Store specifies a 10% down payment and an annual interest rate of 12%. Monthly payments are 5% of the listed purchase price, minus down payment. Write a program that requests the purchase price and down payment from the user and outputs the remaining principal balance, interest amount, and first month payment.

**Attach your algorithm as a word doc to Lab2. Name your file using the following convention: firstInitial\_lastName\_wk2\_lab2.docx**

Inputs:

* Down payment percentage (constant, float) = 0.1
* Annual interest rate (constant, float) = 0.12
* Monthly payment rate (constant, float) = 0.05
* Purchase price (float)
* Down payment amount (float)

Outputs:

* Remaining principal balance (float)
* Interest amount (float)
* First month payment (float)

Steps:

* Get purchase price from user
* Store and calculate the minimum down payment required of user by multiplying purchase price by down payment percentage
* Get the down payment amount from the user
* Confirm the minimum down payment is less than or equal to the users down payment.
* Subtract the down payment from the purchase price and store the result as remaining balance.
* Calculate the interest amount given the remaining balance and store as the resulting interest.
* Calculate the first month payment given remaining balance and store as the first month payment.
* Return the first month payment and resulting interest to the user.