#include <iostream>

#include <iomanip>

using namespace std;

int main() {

//Declare Variables

double demand\_charge = 35.0, consumption\_charge= 1.10, late\_charge = 2.00, balance;

double MetReadRecent, MetReadLasQuart, Ga\_consumed, total\_bill;

int bal;

//Set precision for program

cout << setprecision(2) << fixed;

//Give user instructions

cout << "Greetings, welcome to the water bill calculator.\n";

cout << "This application will allow you to calculate your water bill by adding all the costs that apply to you.\n"

<<"Costs may include, but are not limited to:\n"

<<"1.Consumption charge\n2.Demand Charge\n3.Late Charge\n4.Overdue balance\n";

cout << "To get started please input the following:\n"

<< "Current water meter reading(thousands gallons):";

cin >> MetReadRecent;

cout << "\nLast Quarter's Meter reading(thousands gallons):";

cin >> MetReadLasQuart;

//Calculations for consumption

Ga\_consumed = MetReadRecent - MetReadLasQuart;

//Ask user if they have a balance

cout << "\nDo you have a balance?Input 1 for yes or 2 for no:";

cin >> bal;

//If statements

if (bal == 1) {

cout << "\nPlease input the amount of your balance:$";

cin >> balance;

//Calculate total with unpaid balance

total\_bill = balance + late\_charge + (Ga\_consumed \* consumption\_charge) + demand\_charge;

//Show user bill

cout << "\nDear user your total bill is $" << total\_bill << "\n\n\n";

}

else {

//Calculate total without unpaid balance

total\_bill = (Ga\_consumed \* consumption\_charge) + demand\_charge;

//Show user bill

cout << "\nDear user your total bill is $" << total\_bill << "\n\n\n";

}

return 0;

}