In this assignment you will implement a program called ***"nursery_inv.cpp"*** that calculates the **tax on a purchase *(purchase_tax*), the net cost of the purchase *(net_cost),* the discount on the purchase *(discount),*** and **the total cost of the purchase *(total_cost).*** The program should accept **a plant name *(pname)*, the county name *(cname)*, the cost of the plant *(plant_cost),*** and **the quantity of plants purchased *(quantity). The program should also ask the user if they would like to do another calculation.*** Please consider the following when completing this program:

1) The ***tax rate (in percent) on a purchase (tax_rate)*** is based on the county where the purchase was made. If the county is dade, the tax rate is 6.5%; if the county is broward, the tax rate is 6%; if the county is palm, the tax rate is 7%.
2) The ***net cost of a purchase*** is calculated by the following formula:
net_cost = (quantity x plant_cost).
3) The ***discount*** is based on the ***quantity of plants*** in the purchase. ***The discount is determined is follows:***

- If ***quantity*** equals 0, then the ***discount*** is 0% of the net cost;
- If 1<= ***quantity*** <=5 then ***discount*** = 1% of the net cost; 6<= ***quantity*** <=11 then ***discount*** = 3% of the net cost ; if 12<= ***quantity*** <=20 then ***discount*** = 5% of the net cost; 21<= ***quantity*** <=50 then ***discount*** = 8% of the net cost; ***quantity*** >50 then ***discount*** =12% of the net cost) . Apply discount after the net cost has been calculated.

4) The ***tax on a purchase*** is calculated by the following formula: ***purchase_tax*** = (***net_cost * tax_rate / 100 (drop /100 if you converted the rate from a percentage)***
5). The total cost of a purchase (rounded to the nearest hundredth) is calculated by the following formula:
total_cost = ***net_cost*** +purchase_tax - discount**.**
N o t e : All tax and *cost calculations* *should be rounded to the nearest hundredths.*

Use the following format information to print the variables:

Field	Format
Plant Name	**string**
County Name	**string**
Plant Cost	**XXXX.XX**
Quantity of Plants	**XXXX**
Net Cost of Purchase	**XXXXX.XX**
Purchase Tax	**XXXXX.XX**
Discount on Purchase	**XXXX.XX**
Total Cost of Purchase	**XXXXXXX.XX**

Use the following skeleton to help you start this program which is allow included as a cpp file in the module: nursery_inv.cpp

```
/****SAMPLE PROGRAM HEADER************************************************
Lofton Bullard              Total Points:  10
Due Date:
Course:  C0P3014
Assignment:  Assignment 1
Professor: Dr. Lofton Bullard

Description: (Your program description goes here -- tell what it does--eg...In the program we
processed....


*************************************************************/
#include <iostream> //standard library for i/o
#include <string> // always include this when you use the string class
#include <iomanip>

using namespace std;

int main()
{

       //**********MAGIC FORMULA  WILL EXPLAIN*************************
       cout.setf(ios::fixed);
       cout.setf(ios::showpoint);
       cout.precision(2);
       //*****************************************************************

       string user_response = "y";

       //declare and comment your user variable here
       string pname;   //string that holds the plant name
       string cname;   //string that holds the county name
       //double plant_cost; //double that hold the cost of a plant;
       //int quantity; //int that hold the number of plants purchased;
       //double purchase_tax = 0;
       //double net_cost = 0;
       //double discount = 0;
       //double total_cost = 0;

       while (user_response == "y" || user_response == "Y")
       {
         //The code to get the user's input if given in the following
              //Input Statements
              //cout << "Enter the Plant Name: ";
              //cin >> pname;
              //cout << "Enter the County Name: ";
              //cin >> cname;
              //cout << "Enter the Plant Cost: ";
              //cin >> plant_cost;
              //cout << "Enter the Quantity: ";
              //cin >> quantity;

         //Perform the calculations here
              //Calculations
              //net_cost = quantity * plant_cost;

              //Logic ...if else statements
```

```
            //if (quantity <= 0)
            //     discount = 0;
            //else if (quantity >= 1 && quantity <= 5)
            //     discount = .01 * net_cost;
            //else if ....

            //if (cname == "dade")
            //     purchase_tax = net_cost * .065;
            //else if ....

            //total_cost = ....

            //Print Results to screen here
            //Output Statement
            //cout << endl << endl;
            //cout << "Plant Name = " << pname << endl;
            //cout << "County Name = " ....

            cout << "Would you like to do another calculation (Y or N): " << endl;
            cin >> user_response;
      }

      return  0;
}
```

Handing in your program:

Electronically submit ***"nursery_inv.cpp"*** in the Assignments area of Canvas before the due date and time. Remember, complete the assignment no matter if it is late. It is very important that you do all assignments to master the C++ programming language and get a passing grade.

Sample Calculations:

plant name	county name	plant cost	quantity	tax rate	net cost	discount rate	discount	purchase tax	total cost
owl	dade	10.55	100	0.065	1055.00	0.12	126.60	68.58	996.98
hibiscus	broward	15.82	15	0.06	237.30	0.05	11.87	14.24	239.67
rose	dade	9.99	45	0.065	449.55	0.08	35.96	29.22	442.81
carnation	palm	7.99	32	0.07	255.68	0.08	20.45	17.90	253.12
rose	palm	7.99	60	0.07	479.40	0.12	57.53	33.56	455.43
widow	palm	25.75	5	0.07	128.75	0.01	1.29	9.01	136.48
carnation	dade	12.55	10	0.065	125.50	0.03	3.77	8.16	129.89
carnation	dade	12.55	8	0.065	100.40	0.03	3.01	6.53	103.91
lilly	broward	6.92	150	0.06	1038.00	0.12	124.56	62.28	975.72