Create a class called Invoice that a hardware store might use to represent an invoice for an item sold at the store. An Invoice should include four pieces of information as instance. Data Members ‐ • partNumber (type String) • partDescription (type String) • quantity of the item being purchased (type int) • price\_per\_item (type double) Your class should have a constructor that initializes the four instance variables. Provide a set and a get method for each instance variable. In addition, provide a method named getInvoiceAmount() that calculates the invoice amount (i.e., multiplies the quantity by the price per item), then returns the amount as a double value. If the quantity is not positive, it should be set to 0. If the price per item is not positive,it should be set to0.0. Write a test application named invoiceTest that demonstrates class Invoice’s capabilities.

SOURCE CODE:

#include<iostream>

using namespace std;

class invoice

{

    string partnumber;

    string partdescription;

    int quantity;

    double priceperitem;

    public:

    invoice(){}

    invoice(string partnumber,string partdescription,int quantity,double priceperitem)

    {

        this->partnumber=partnumber;

        this->partdescription=partdescription;

        if(quantity<0)

        {

            quantity=0;

        }

        this->quantity=quantity;

        this->priceperitem=priceperitem;

    }

    void setpartnumber(string partnumber)

    {

        this->partnumber=partnumber;

    }

    string getpartnumber()

    {

        return partnumber;

    }

    void setpartdescription(string partdescription)

    {

        this->partdescription=partdescription;

    }

    string getpartdescription()

    {

        return partdescription;

    }

    void setquantity(int quantity)

    {

        this->quantity=quantity;

    }

    int getquantity()

    {

        return quantity;

    }

    void setpriceperitem(double priceperitem)

    {

        this->priceperitem=priceperitem;

    }

    double getpriceperitem()

    {

        return priceperitem;

    }

    double calcin()

    {

        return priceperitem\*quantity;

    }

};

int main()

{

    invoice d("1234","happy",20,3000);

    cout<<d.getpartnumber()<<endl;

    cout<<d.getpartdescription()<<endl;

    cout<<d.getquantity()<<endl;

    cout<<d.getpriceperitem()<<endl;

    cout<<d.calcin();

    d.setpartnumber("123");

    d.setpartdescription("cae");

    d.setquantity(-25);

    d.setpriceperitem(800);

    cout<<d.getpartnumber()<<endl;

    cout<<d.getpartdescription()<<endl;

    cout<<d.getquantity()<<endl;

    cout<<d.getpriceperitem()<<endl;

    cout<<d.calcin();

}

OUTPUT:

