



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

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REG no : 19BCS0012
Course : OBJECT ORIENTED PRORAMMING
Course code : CSC2002
Assignment : PROPLEM SOLVING

Prepare the Bill for the customers in a Departmental Store.

Source code:

```
#include <cstdlib>
#include<iostream>
using namespace std;
#include<fstream>
#include<iomanip>
#include<conio.h>
```

```

float bill_amount;
int i=0;
int c;
int coun=0;
int s=26;
    string p_n[100];
    float q[100];
    float p[100];
    float t_p[100];
    string date;
    float m[100];
    int k;

class market
{
public:

    float quantity;
    float price;
    float total_price;
    void get_data();
    void display_data();
    void store_data();
    void search_data();
    void admin();
};

void market::admin()
{
    string a[100];
    a[1]="blue_pen";a[2]="A4sheet";a[3]="shot_size_scale";a[4]="red_pen";a[5]="eraeser";
    a[6]="long_size_scale";a[7]="nadraja_pencil";a[8]="a3sheet";a[9]="ball_point_pen";a[10]="
    blue_ink";
    a[26]="reb_ink";a[11]="green_ink";a[12]="black_ink";a[13]="100pages_note";a[14]="200pages
    note";
    a[15]="gum";a[16]="chart";a[17]="sketch";a[18]="paint_box";a[19]="geomentry_box";a[20]="glitter
    ing_pen";
    a[21]="sharpner";a[22]="thread";a[23]="shabluar";a[24]="pin";a[25]="paper_holder";
    m[1]=12;m[2]=8;m[3]=7;m[4]=7;m[5]=4;m[6]=9;m[7]=16;m[8]=3;m[9]=13;m[10]=16;m[11]=15;m[12]
    ]=16;
    m[13]=9;m[14]=14;m[15]=16;m[16]=19;m[17]=14;m[18]=22;m[19]=23;m[20]=19;m[21]=22;m[22]=1
    7;m[23]=15;
    m[24]=19;m[25]=17;m[26]=19; int l;
    cout<<"press 1 to edit coast of fruits"<<endl<<"press 2 for add extra items"<<endl;
    cin>>l;

```

```

if(l==1)
{
    do{
        cout<<"enter the fruit name"<<endl;
        string fn;
        cin>>fn;
        cout<<"enter the coast " <<endl;
        float cs;
        cin>>cs;
        for(i=0;i<100;i++)
        {
            if(a[i]==fn)
            {
                m[i]=cs;
            }
        }
        cout<<"press 1 to continue or press 0 to stop"<<endl;
        cin>>c;
    }while(c!=0);
}
else if(l==2)
{
    i=26; do{

        cout<<"enter the new fruit name"<<endl;
        cin>>a[i];
        cout<<"enter the coast for a kg"<<endl;
        cin>>m[i];
        s++;
        cout<<"press 1 to continue or 0 to stop"<<endl;
        cin>>c;
        i++;
    }while(c!=0);
}
}

void market::get_data()
{
    string product_name;
    string a[100];
    a[1]="blue_pen";a[2]="A4sheet";a[3]="shot_size_scale";a[4]="red_pen";a[5]="eraeser";
    a[6]="long_size_scale";a[7]="nadrja_pencil";a[8]="a3sheet";a[9]="ball_point_pen";a[10]="
    blue_ink";
    a[26]="reb_ink";a[11]="green_ink";a[12]="black_ink";a[13]="100pages_note";a[14]="200pages
    note";

```

```

a[15]="gum";a[16]="chart";a[17]="sketch";a[18]="paint_box";a[19]="geometry_box";a[20]="glitter
ing_pen";
a[21]="sharpner";a[22]="thread";a[23]="shablur";a[24]="pin";a[25]="paper_holder";
m[1]=12;m[2]=8;m[3]=7;m[4]=7;m[5]=4;m[6]=9;m[7]=16;m[8]=3;m[9]=13;m[10]=16;m[11]=15;m[12]
]=16;
m[13]=9;m[14]=14;m[15]=16;m[16]=19;m[17]=14;m[18]=22;m[19]=23;m[20]=19;m[21]=22;m[22]=1
7;m[23]=15;
m[24]=19;m[25]=17;m[26]=19;
cout<<endl<<endl<<"\t\tavaliable probjects"<<endl;
for(int d=0;d<=s;d++)
{
    cout<<"\t"<<a[d]<<endl;
for(int j=d+1;j<=d+1;j++)
{
    cout<<"\t\t"<<a[j]<<endl;
}
d++;
}

```

```

    cout<<"product name      :";
    cin>>product_name;
    p_n[i]=product_name;
    cout<<endl;
    cout<<"quantity          :";
    cin>>quantity;
    q[i]=quantity;
    for(int n=1;n<100;n++)
    {
        if(product_name==a[n])
        {
            price=m[n];
            p[i]=price;
        }
    }
    cout<<"total price        :";
    total_price=quantity*price;
    t_p[i]=total_price;
    cout<<total_price<<endl<<endl;
    bill_amount+=total_price;

}
void market::store_data()
{
    string file_name;

```

```

file_name=date;

ofstream f;

f.open(file_name.c_str(),ios::out|ios::app);

if (f.is_open())

{ f<<setw(35)<<"bill records"<<endl<<endl;
  f<<" date : "<<date<<endl;
  f<<"===== "<<endl<<endl;
  f<<"product name      price      quantity      total price"<<endl;
  for(k=0;k<i;k++)
  {

    f<<p_n[k]<<endl;

    f<<setw(28)<<p[k]<<setw(14)<<q[k]<<setw(25)<<t_p[k]<<endl;

f<<"===== "<<endl<<endl;
  }
  f<<setw(22)<<cout<<" items purshed"<<endl<<endl<<setw(38)<<"total bil amout =
"<<bill_amount;

  f.close();
  ifstream inFile;

  string stuff;

  inFile.open(file_name.c_str());

  if (inFile.is_open())

  {

    while (!inFile.eof())

    {

```

```

        inFile >> stuff;

        cout << stuff << endl;
    }

    inFile.close();

} else

{

    cout << "Could not open the file for reading" << endl;
}

} else

{

    cout << "Could not open file for output!" << endl;

}
system("CLS");
}

void market::search_data()
{

    fstream file;
    string line, t, q, filename;

    cin >> filename;

    file.open(filename.c_str());

    while(file.good())
    {

```

```

        getline(file,line);
        cout<< line<<endl;
    }

}

void market::display_data()
{

    cout<<" date : "<<date<<endl;
    cout<<"===== "<<endl<<endl;
    cout<<"product name      price      quantity      total price"<<endl;
    for(k=0;k<i;k++)
    {

        cout<<p_n[k]<<endl;

        cout<<setw(28)<<p[k]<<setw(14)<<q[k]<<setw(25)<<t_p[k]<<endl;

    }

    cout<<"===== "<<endl<
    <endl;
    }
    cout<<setw(22)<<coun<<" items purshed"<<endl<<endl<<setw(38)<<"total bil amout =
"<<bill_amount;

}

int main()
{

    market b[200];
    int g;
    FIRST:
    ONE:
        system("CLS");
    THREE:
    bill_amount=0;
    cout<<setw(25)<<"enter your choice"<<endl;
    cout<<endl<<setw(20)<<"  1. billing "<<endl<<endl<<setw(20)<<"      2. search record "<<endl;
    cout<<endl<<setw(18)<<" 3. admin "<<endl;
    c=0;
    cin>>c;
    if(c==1)

```

```

{

    cout<<setw(30)<<"billing"<<endl<<endl;
    cout<<" enter the date :";
    cin>>date;
    ZERO:
    //cout<<i+1<<". ";
    b[i].get_data();
    i++;

    cout<<endl<<"\n press 1 for continue and 2 for stop : ";
    coun++;
    int c1;
    cin>>c1;
    cout<<endl<<endl;
    int j=0;

    if(c1==1)
    {
        goto ZERO;
    }
    else
    if(c1==2)
    {
        cout<<coun<<"items purchased ";
        cout<<"total bill amount"<<bill_amount;

        b[j].store_data();
        b[j].display_data();
        j++;
        coun=0;
        i=0;
    }
    TWO:
    cout<<endl<<"press 1 to go back"<<endl;

    cin>>g;
    if(g==1)
    {
        goto ONE;
    }
    else
    {
        cout<<"invalid input";
        goto TWO;
    }
}

```



```

    }

}

else
if(c==2)
{
    cout<<"    enter the date to see to the record ";
    b[i].search_data();
    i++;
    cout<<endl<<" press 1 to go back";
    cin>>g;
    if(g==1)
    {
        goto THREE;
    }
    else
    {
        cout<<"invalid input";
    }
}
else if(c==3)
{
    b[i].admin();
    goto FIRST;
}

else{
    cout<<"invalid input";
}

return 0;
}

```

Out put

C:\Users\USER\Desktop\oops da\19BCS0012_NITHISH.G.exe

enter your choice

1. billing
2. search record
3. admin

1

billing

enter the date :7.7.2020

avaliable products

	blue_pen
A4sheet	shot_size_scale
red_pen	eraeser
long_size_scale	nadrajapencil
a3sheet	ball_point_pen
blue_ink	green_ink
black_ink	100pages_note
200pages note	gum
chart	sketch
paint_box	geometry_box
glittering_pen	sharpner
thread	shabluar
pin	paper_holder
reb_ink	

product name :pin

quantity :3

total price :57

press 1 for continue and 2 for stop : 1

press 1 for continue and 2 for stop : 1

avaliabile probjects

A4sheet	blue_pen
red_pen	shot_size_scale
long_size_scale	eraeser
a3sheet	nadrajapencil
blue_ink	ball_point_pen
black_ink	green_ink
200pages note	100pages_note
chart	gum
paint_box	sketch
glittering_pen	geometry_box
thread	sharpner
pin	shabluar
reb_ink	paper_holder

product name : blue_pen
quantity : 3
total price : 36

press 1 for continue and 2 for stop : 2

C:\Users\USER\Desktop\oops da\19BCS0012_NITHISH.G.exe

date : 7.7.2020

=====

product name	price	quantity	total price
pin	19	3	57
=====			
blue_pen	12	3	36
=====			

2 items purshed

total bil amout = 93

press 1 to go back

1_

```
C:\Users\USER\Desktop\oops da\19BCS0012_NITHISH.G.exe
enter your choice
1. billing
2. search record
3. admin
2
enter the date to see to the record 7.7.2020
bill records
date : 7.7.2020
=====
product name      price      quantity      total price
pin
=====
blue_pen          12         3             36
=====
2 items purshed
total bil amout = 93
press 1 to go back_
```

```
total bil amout = 93
press 1 to go back 1
enter your choice
1. billing
2. search record
3. admin
3
press 1 to edit coast of fruits
press 2 for add extra items
1
enter the fruit name
pin
enter the coast
20
press 1 to continue or press 0 to stop
_
```