```cpp
class bill
{
char customer[20];
char contact[20];
char d[20];
char fest[20];
char *line;
char pid[20];
char item_name[30];
char price[20];
char date[20];
double mrp;
double amount;
double billedamt;
double totalbill;
double dbill;

public:
    bill()//Initialization through constructor for bill amount i.e. initial amount to be
zero
    {
        totalbill=0;
        dbill=0;
    }

    void billdetails()
    {
        system("mode 130,49");
        cout<<
"_____
_____"<<endl;
        cout<<"                                                              INFINITY SUPER
MARKET                                          "<<endl;
        cout<<
"_____
_____"<<endl;

        using namespace std;
        #include"item.cpp"
        item ob2;
        ob2.displayitem();
        cart ob;
        gotoxy(0,17);
        cout<<
"_____
_____"<<endl;
        gotoxy(60,18);
        cout<<"ADD ITEMS"<<endl;
        billedamt=0;
        char z;
        ofstream ofs("billdetails.csv",ios::out|ios::app);
        gotoxy(0,19);
        cout<<endl<<"\nENTER DATE (DD-MM-YYYY): ";
        cin>>date;
        cout<<"ENTER CUSTOMER NAME: ";
        cin>>customer;
        cout<<"ENTER CONTACT NO: ";
        cin>>contact;
        ofs<<date<<","<<customer<<","<<contact<<"*"<<endl;
        int f=0;
        int y=27;
        int x=2;
        cout<<"                                      's' TO SAVE AND EXIT OR ANY KEY
TO CONTINUE: ";
        gotoxy(x,y);
        cout<<"ITEM";
        gotoxy(x+12,y);
        cout<<"QTY.";
        gotoxy(x+20,y);
        cout<<"MRP.";
```

```cpp
        dbill=0;
        do{
        char pc[10];
        gotoxy(0,25);
        cout<<"ENTER PRODUCT ID: ";
        gotoxy(19,25);
        cout<<"       ";
        gotoxy(19,25);
        cin>>pc;
        y++;
        f++;
        if(f==12)
        {
        f=0;
        x=x+35;
        y=28;
        }
        mrp=ob.itemfetch(pc,x,y);
        amount=billamt(mrp);
        billedamt=billedamt+amount;
        gotoxy(87,24);
        z=getch();

        }while(z!='s');
        ofs.close();
        discount(billedamt,date);
    }

    double billamt(double amt)
{
    totalbill=0;
    amt=amt-(0.1*amt);
    totalbill=totalbill+amt;
    gotoxy(112,28);
    cout<<"           ";
    gotoxy(100,28);
    dbill=dbill+totalbill;
    cout<<"Total Amount: "<<dbill;
    return totalbill;

}
    void discount(double disc,char date_d[])
    {

        billedamt=0;
        int k=0;
        int c=0;
        int flag=0;
        ofstream ofs("billdetails.csv",ios::out|ios::app);
        ifstream ifs("dates.csv");
        line=new char[sizeof(ifs)];
        ifs>>line;
        while(!ifs.eof())
        {
            for(;line[k]!=',';k++)
                d[c++]=line[k];
                d[c]='\0';
                c=0;
                k++;
            for(;line[k]!='*';k++)
                fest[c++]=line[k];
                fest[c]='\0';
                c=0;
                k=0;

            if(strcmp(date,d)==0)
            {
             flag=1;
             break;
            }
```

```cpp
            delete []line;
            line=new char[sizeof(ifs)];
            ifs>>line;
        }
    if(flag==1)
    {
        if(disc>=2000)
        {

            billedamt=disc-(0.4*disc);
            gotoxy(90,42);
            cout<<"With 10% Discount On Each Item";
            gotoxy(90,44);
            cout<<"Festive Season, Its "<<"*"<<fest<<"*";
            gotoxy(90,46);
            cout<<"40% "<<"*"<<fest<<"*"<<" Discount >2000";
            gotoxy(90,48);
            cout<<"FINAL BILL= Rs"<<billedamt;
            ofs<<"BILL"<<","<<"Rs"<<","<<billedamt<<"*"<<endl;
            ofs<<"#"<<endl;
        }
        else
        {

            gotoxy(90,42);
            cout<<"With 10% Discount On Each Item";
            gotoxy(90,44);
            cout<<"Festive Season, Its "<<"*"<<fest<<"*";
            gotoxy(90,46);
            cout<<"No "<<"*"<<fest<<"*"<<" Discount <2000";
            gotoxy(90,48);
            cout<<"FINAL BILL= Rs"<<disc;
            ofs<<"BILL"<<","<<"Rs"<<","<<disc<<"*"<<endl;
            ofs<<"#"<<endl;
        }
    }

    else
        {

    if(disc>=5000)
    {
        billedamt=disc-(0.05*disc);
        gotoxy(95,42);
        cout<<"With 10% Discount On Each Item";
        gotoxy(95,44);
        cout<<"5% Extra Discount for >5000";
        gotoxy(95,46);
        cout<<"FINAL BILL= Rs"<<billedamt;
        ofs<<"BILL"<<","<<"Rs"<<","<<billedamt<<"*"<<endl;
        ofs<<"#"<<endl;
    }
    else
    {
        gotoxy(95,42);
        cout<<"With 10% Discount On Each Item"<<endl;
        gotoxy(95,44);
        cout<<"FINAL BILL= Rs"<<disc;
        ofs<<"BILL"<<","<<"Rs"<<","<<disc<<"*"<<endl;
        ofs<<"#"<<endl;
    }
    }
    }
void see_archived_details(char DATE[])//new funcction for viewing bill by date
    {
        int i,c,y;
        int flag=0;
    ifstream ifs("billdetails.csv");
    line=new char[sizeof(ifs)];
    ifs>>line;
```

```cpp
        gotoxy(45,2);
        cout<<"Date";
        gotoxy(57,2);
        cout<<"Customer";
        gotoxy(67,2);
        cout<<"Contact";
        y=5;
        while(!ifs.eof())
        {
            c=0;
            i=0;
            for(;line[i]!=',';i++)
                pid[c++]=line[i];
            pid[c]='\0';
            i++;
            c=0;
            if(strcmp(pid,DATE)==0)
            {
            flag=1;
            while(!ifs.eof()&&line[0]!='#')
            {
            c=0;
            i=0;
            for(;line[i]!=',';i++)
                pid[c++]=line[i];
            pid[c]='\0';
            i++;
            c=0;
            for(;line[i]!=',';i++)
                item_name[c++]=line[i];
            item_name[c]='\0';
            i++;
            c=0;
            for(;line[i]!='*';i++)
                price[c++]=line[i];
            price[c]='\0';
            gotoxy(45,y);
        cout<<pid;
        gotoxy(57,y);
        cout<<item_name;
        gotoxy(67,y);
        cout<<price;
            delete []line;
            line=new char[sizeof(ifs)];
            ifs>>line;
            y++;
            }
            }
            delete []line;
            line=new char[sizeof(ifs)];
            ifs>>line;
        }
    if(flag!=1)
    {
        cout<<"\n\n\nNot Found...";
    }
    }

};
```