

```

#include <iostream>
#include<stdlib.h>
using namespace std;
class node
{
    public:
    node* next;
    node* prev;
    int seat;
    string id;
    int status;
};
class cinemax
{
    public:
    node* head,* tail ,* temp;
    cinemax()
    {
        head=NULL;
    }
    void create_list();
    void display();
    void book();
    void cancel();
    void avail();
};
void cinemax::create_list()
{
    int i=1;
    temp=new node;
    temp->seat=1;
    temp->status=0;
    temp->id="null";
    tail=head=temp;
    for(int i=2;i<=70;i++)
    {
        node *p;
        p= new node;
        p->seat=i;
        p->status=0;
        p->id="null";
        tail->next=p;
        p->prev=tail;
        tail=p;
        tail->next=head;
        head->prev=tail;
    }
}
void cinemax::display()
{
    {
        int r=1;
        node* temp;
        temp=head;
        int count=0;

        cout<<"\n-----"
        \n";
        cout<<"                               Screen this
way                               \n";

        cout<<"-----"
        \n";
        while(temp->next!=head)
        {

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        if(temp->seat/10==0)
            cout<<"S0"<<temp->seat<<" :";
        else
            cout<<"S"<<temp->seat<<" :";
        if(temp->status==0)
            cout<<"|_|" ;
        else
            cout<<"|_B_|" ;
        count++;
        if(count%7==0)
        {
            cout<<endl;
            r++;
        }

        temp=temp->next;
    }
    cout<<"S"<<temp->seat<<" :";
    if(temp->status==0)
        cout<<"|_|" ;
    else
        cout<<"|_B_|" ;

}
}
void cinemax::book()
{
    int x;
    string y;
    label:

    cout<<"\n\nEnter seat number to be booked\n";
    cin>>x;
    cout<<"Enter your id number\n";
    cin>>y;
    if(x<1||x>70)
    {
        cout<<"Enter correct seat number to book (1-70)\n";
        goto label;
    }
    node *temp;
    //temp=new node;
    temp=head;
    while(temp->seat!=x)
    {
        temp=temp->next;
    }
    if(temp->status==1)
        cout<<"seat already booked!\n";
    else{
        temp->status=1;
        temp->id=y;
        cout<<"seat "<<x<<" booked!\n";
    }
}

}
void cinemax::cancel()
{
    int x;
    string y;
    label1:
    cout<<"enter seat number to cancel booking\n";
    cin>>x;
    cout<<"enter you id\n";
    cin>>y;

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    if(x<1||x>70)
    {
        cout<<"Enter correct seat number to cancel (1-70)\n";
        goto labell;
    }
    node *temp;
    //temp=new node;
    temp=head;
    while(temp->seat!=x)
    {
        temp=temp->next;
    }
    if(temp->status==0)
    {
        cout<<"seat not booked yet!!\n";
    }
    else
    {
        if(temp->id==y)
        {
            temp->status=0;
            cout<<"seat cancelled!\n";
        }
        else
        cout<<"wrong user id ,seat cannot be cancelled\n";
    }
}
void cinemax::avail()
{
    int r=1;
    node* temp;
    temp=head;
    int count=0;
    cout<<"\n\n\n\n";

    cout<<"-----\n";
    cout<<"                               Screen this\n";
    cout<<"-----\n";
    while(temp->next!=head)
    {
        {
            if(temp->seat/10==0)
            cout<<"S0"<<temp->seat<<" : ";
            else
            cout<<"S"<<temp->seat<<" : ";
            if(temp->status==0)
            cout<<"|__| ";
            else if(temp->status==1)
            cout<<"    ";
            count++;
            if(count%7==0)
            {
                cout<<endl;
            }
        }
        temp=temp->next;
    }
}

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        if(temp->status==0)
        {
            cout<<"S"<<temp->seat<<" : ";
            if(temp->status==0)
                cout<<" |__| ";
        }
    }
}
int main()
{
    cinemax obj;
    obj.create_list();
    int ch;
    char c='y';
    while(c=='y')
    {
        obj.display();
        cout<<"\n *****\n";
        cout<<"          CINEMAX MOVIE THEATRE          \n";
        cout<<" *****\n";
        cout<<"\nEnter choice\n1.Current seat status\n2.Book seat \n3.Available
seat\n4.Cancel seat\n";
        cin>>ch;
        switch(ch)
        {
            case 1:obj.display();
                    break;
            case 2: obj.book();
                    break;
            case 3:obj.avail();
                    break;
            case 4: obj.cancel();
                    break;
            default: cout<<"Wrong choice input\n";
        }
        cout<<"\nWant operation again (y/n)\n";
        cin>>c;
        system("clear");
    }

    return 0;
}

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Output : -

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-----
                        Screen this way
-----
S01 : |__| S02 : |__| S03 : |__| S04 : |__| S05 : |__| S06 : |__| S07 : |__|
S08 : |__| S09 : |__| S10 : |__| S11 : |__| S12 : |__| S13 : |__| S14 : |__|
S15 : |__| S16 : |_B_| S17 : |__| S18 : |__| S19 : |_B_| S20 : |__| S21 : |__|
S22 : |__| S23 : |__| S24 : |__| S25 : |__| S26 : |__| S27 : |__| S28 : |_B_|
S29 : |__| S30 : |__| S31 : |__| S32 : |__| S33 : |__| S34 : |__| S35 : |__|
S36 : |__| S37 : |__| S38 : |__| S39 : |_B_| S40 : |__| S41 : |__| S42 : |__|
S43 : |__| S44 : |__| S45 : |__| S46 : |__| S47 : |__| S48 : |__| S49 : |__|
S50 : |__| S51 : |__| S52 : |__| S53 : |__| S54 : |__| S55 : |__| S56 : |__|
S57 : |__| S58 : |__| S59 : |__| S60 : |__| S61 : |__| S62 : |__| S63 : |__|
S64 : |__| S65 : |__| S66 : |__| S67 : |__| S68 : |__| S69 : |__| S70 : |__|
*****
CINEMAX MOVIE THEATRE
*****

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Enter choice  
1.Current seat status  
2.Book seat  
3.Available seat  
4.Cancel seat  
3

-----  
Screen **this** way  
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S01 :		S02 :		S03 :		S04 :		S05 :		S06 :		S07 :	
S08 :		S09 :		S10 :		S11 :		S12 :		S13 :		S14 :	
S15 :		S16 :		S17 :		S18 :		S19 :		S20 :		S21 :	
S22 :		S23 :		S24 :		S25 :		S26 :		S27 :		S28 :	
S29 :		S30 :		S31 :		S32 :		S33 :		S34 :		S35 :	
S36 :		S37 :		S38 :		S39 :		S40 :		S41 :		S42 :	
S43 :		S44 :		S45 :		S46 :		S47 :		S48 :		S49 :	
S50 :		S51 :		S52 :		S53 :		S54 :		S55 :		S56 :	
S57 :		S58 :		S59 :		S60 :		S61 :		S62 :		S63 :	
S64 :		S65 :		S66 :		S67 :		S68 :		S69 :		S70 :	

Want operation again (y/n)