

Open test20.cpp Save ~ / Documents / FDS

```
1 #include <iostream>
2 #include<stdlib.h>
3 using namespace std;
4 class node
5 {
6     public:
7     node* next;
8     node* prev;
9     int seat;
10    string id;
11    int status;
12 };
13
14 class cinemax
15 {
16     public:
17     node* head,* tail ,* temp;
18     cinemax()
19     {
20         head=NULL;
21     }
22     void create_list();
23     void display();
24     void book();
25     void cancel();
26     void avail();
27 };
28
29 void cinemax::create_list()
30 {
31     int i=1;
32     temp=new node;
33     temp->seat=i;
34     temp->status=0;
35     temp->id="null";
36     tail=head=temp;
37     for(int i=2;i<=70;i++)
38     {
39         node *p;
```

C++ Tab Width: 8 Ln 60, Col 32 INS

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```
39         node *p;
40         p= new node;
41         p->seat=i;
42         p->status=0;
43         p->id="null";
44         tail->next=p;
45         p->prev=tail;
46         tail=p;
47         tail->next=head;
48         head->prev=tail;
49     }
50 }
51
52 void cinemax::display()
53 {
54     {
55         int r=1;
56         node* temp;
57         temp=head;
58         int count=0;
59         cout<<"\n-----\n";
60         cout<<" Screen this way \n";
61         cout<<"-----\n";
62         while(temp->next!=head)
63         {
64             if(temp->seat/10==0)
65                 cout<<"S0"<<temp->seat<<" ";
66             else
67                 cout<<"S"<<temp->seat<<" ";
68
69             if(temp->status==0)
70                 cout<<"|_| ";
71             else
72                 cout<<"|_B_| ";
73             count++;
74             if(count%7==0)
75             {
76                 cout<<endl;
77                 r++;
```

C++ Tab Width: 8 Ln 77, Col 1 INS

```
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77         r++;
78     }
79     temp=temp->next;
80 }
81 cout<<"S"<<temp->seat<<" : ";
82 if(temp->status==0)
83     cout<<"|_|_| ";
84 else
85     cout<<"|_B_| ";
86 }
87 }
88
89 void cinemax::book()
90 {
91     int x;
92     string y;
93     label:
94     cout<<"\n\nEnter seat number to be booked\n";
95     cin>>x;
96     cout<<"Enter your ID number\n";
97     cin>>y;
98     if(x<1||x>70)
99     {
100         cout<<"Enter correct seat number to book (1-70)\n";
101         goto label;
102     }
103     node *temp;
104     temp=new node;
105     temp=head;
106     while(temp->seat!=x)
107     {
108         temp=temp->next;
109     }
110
111     if(temp->status==1)
112         cout<<"Seat already booked!\n";
113     else
114     {
115         temp->status=1;
```

```
Open  test20.cpp  Save  ~./Documents/FDS
116         temp->id=y;
117         cout<<"Seat "<<x<<" booked!\n";
118     }
119 }
120
121 void cinemax::cancel()
122 {
123     int x;
124     string y;
125     label1:
126     cout<<"Enter seat number to cancel booking\n";
127     cin>>x;
128     cout<<"Enter you ID\n";
129     cin>>y;
130     if(x<1||x>70)
131     {
132         cout<<"Enter correct seat number to cancel (1-70)\n";
133         goto label1;
134     }
135     node *temp;
136     temp=new node;
137     temp=head;
138     while(temp->seat!=x)
139     {
140         temp=temp->next;
141     }
142     if(temp->status==0)
143     {
144         cout<<"Seat not booked yet!!\n";
145     }
146     else
147     {
148         if(temp->id==y)
149         {
150             temp->status=0;
151             cout<<"Seat Cancelled!\n";
152         }
153         else
154             cout<<"Wrong User ID !!! Seat cannot be cancelled!!!\n";
```

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test20.cpp
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Open  [+]
```

```
155     }
156 }
157
158 void cinemax::avail()
159 {
160     int r=1;
161     node* temp;
162     temp=head;
163     int count=0;
164     cout<<"\n\n\n\n";
165     cout<<"\n-----\n";
166     cout<<" Screen this way \n";
167     cout<<"-----\n";
168     while(temp->next!=head)
169     {{
170         if(temp->seat/10==0)
171         {
172             cout<<"S0"<<temp->seat<<" : ";
173         }
174         else
175             cout<<"S"<<temp->seat<<" : ";
176         if(temp->status==0)
177             cout<<"|_| " ";
178         else if(temp->status==1)
179             cout<<" " ";
180
181         count++;
182         if(count%7==0)
183         {
184             cout<<endl;
185         }
186     }}
187     temp=temp->next;
188 }
189
190 if(temp->status==0)
191 {
192     cout<<"S"<<temp->seat<<" : ";
193     if(temp->status==0)
```

C++ Tab Width: 8 Ln 116, Col 1 INS

```
test20.cpp
~/Documents/FDS

Open  [+]
```

```
193         if(temp->status==0)
194             cout<<"|_| " ";
195     }
196 }
197
198 int main()
199 {
200     cinemax obj;
201     obj.create_list();
202     int ch;
203     char c='y';
204     while(c=='y')
205     {{
206         obj.display();
207         cout<<"\n*****\n";
208         cout<<" CINEMAX MOVIE THEATRE\n";
209         cout<<"*****\n";
210         cout<<"\nEnter Choice\n1.Current SeatStatus\n2.Book Seat \n3.Available Seat\n4.CancelSeat\n";
211         cin>>ch;
212         switch(ch)
213         {
214             case 1:
215                 obj.display();
216                 break;
217             case 2:
218                 obj.book();
219                 break;
220             case 3:
221                 obj.avail();
222                 break;
223             case 4:
224                 obj.cancel();
225                 break;
226             default:
227                 cout<<"Wrong choice input\n";
228         }
229         cout<<"\nDo you want to perform any other operation : (y/n)\n";
230         cin>>c;
231     }}
232     return 0;
233 }
```

C++ Tab Width: 8 Ln 231, Col 9 INS

```
onkar@ubuntu: ~/Documents/FDS
onkar@ubuntu:~$ cd Documents/FDS
onkar@ubuntu:~/Documents/FDS$ g++ test20.cpp
onkar@ubuntu:~/Documents/FDS$ ./a.out

-----
Screen this way
-----
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 :|_|
*****
CINEMAX MOVIE THEATRE
*****

Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
4.CancelSeat
12
Wrong choice input

Do you want to perform any other operation : (y/n)
y

-----
Screen this way
-----
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 :|_|
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
S08 :|_| S09 :|_| S10 :|_| S11 :|_| S12 :|_B_| S13 :|_| S14 :|_|
S15 :|_| S16 :|_| S17 :|_| S18 :|_| S19 :|_| S20 :|_| S21 :|_|
S22 :|_| S23 :|_| S24 :|_| S25 :|_| S26 :|_| S27 :|_| S28 :|_|
```

```
onkar@ubuntu: ~/Documents/FDS
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
*****

Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
4.CancelSeat
3

-----
Screen this way
-----
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 :|_|
Do you want to perform any other operation : (y/n)
y

-----
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
S08 :|_| S09 :|_| S10 :|_| S11 :|_| S12 :|_B_| S13 :|_| S14 :|_|
```



```
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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
*****

Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
4.CancelSeat
1

-----
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
S08 :|_| S09 :|_| S10 :|_| S11 :|_| S12 :| B_| 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 :|_|
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S64 :|_| S65 :|_| S66 :|_| S67 :|_| S68 :|_| S69 :|_| S70 :|_|
Do you want to perform any other operation : (y/n)
y

-----
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
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S29 :|_| S30 :|_| S31 :|_| S32 :|_| S33 :|_| S34 :|_| S35 :|_|
S36 :|_| S37 :|_| S38 :|_| S39 :|_| S40 :|_| S41 :|_| S42 :|_|
```

```
onkar@ubuntu: ~/Documents/FDS

*****
CINEMAX MOVIE THEATRE
*****

Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
4.CancelSeat
4
Enter seat number to cancel booking
12
Enter you ID
9509
Seat Cancelled!

Do you want to perform any other operation : (y/n)
y

-----
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
S08 :|_| S09 :|_| S10 :|_| S11 :|_| S12 :|_| S13 :|_| S14 :|_|
S15 :|_| S16 :|_| S17 :|_| S18 :|_| S19 :|_| S20 :|_| S21 :|_|
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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 :|_|
*****
CINEMAX MOVIE THEATRE
*****

Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
```

```
onkar@ubuntu: ~/Documents/FDS
-----
Screen this way
-----
S01 :|_| S02 :|_| S03 :|_| S04 :|_| S05 :|_| S06 :|_| S07 :|_|
S08 :|_| S09 :|_| S10 :|_| S11 :|_| S12 :|_| S13 :|_| S14 :|_|
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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 :|_|
*****
CINEMAX MOVIE THEATRE
*****
Enter Choice
1.Current SeatStatus
2.Book Seat
3.Available Seat
4.CancelSeat
1
-----
Screen this way
-----
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 :|_|
Do you want to perform any other operation : (y/n)
n
onkar@ubuntu:~/Documents/FDS$
```