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Give Current Max

Problem

Submissions

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Submitted 27 minutes ago • Score: 20.00

Status: **Accepted**

✓	Test Case #0	✓	Test Case #1	✓	Test Case #2
✓	Test Case #3	✓	Test Case #4	✓	Test Case #5
✓	Test Case #6	✓	Test Case #7	✓	Test Case #8

Submitted Code

Language: C++20

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```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 class Student
5 {
6 public:
7     string name;
8     int roll;
9     int marks;
10    Student(string name, int roll, int marks)
11    {
12        this->name = name;
13        this->roll = roll;
14        this->marks = marks;
15    }
16 };
17
18 class cmp
19 {
20 public:
21     bool operator()(Student a, Student b)
22     {
23         if (a.marks < b.marks)
24         {
25             return true;
26         }
27
28         else if (a.marks > b.marks)
29         {
30             return false;
31         }
32
33         else
```

```
34     {
35         if (a.roll > b.roll)
36         {
37             return true;
38         }
39
40         else
41         {
42             return false;
43         }
44     }
45 }
46 };
47
48 int main()
49 {
50     priority_queue<Student, vector<Student>, cmp> pq;
51     int n;
52     cin >> n;
53     while (n-->0)
54     {
55         string name;
56         int roll, marks;
57         cin >> name >> roll >> marks;
58
59         Student obj(name, roll, marks);
60         pq.push(obj);
61     }
62
63     // while(!pq.empty())
64     // {
65     //     cout<<pq.top().name <<" "<<pq.top().roll<<" "<< pq.top().marks <<endl;
66     //     pq.pop();
67     // }
68
69     int q;
70     cin >> q;
71     while (q-->0)
72     {
73         int command;
74         cin >> command;
75         if (command == 0)
76         {
77             string name;
78             int roll, marks;
79             cin >> name >> roll >> marks;
80             Student obj2(name, roll, marks);
81             pq.push(obj2);
82             if (!pq.empty())
83             {
84                 cout << pq.top().name << " " << pq.top().roll << " " << pq.top().marks << endl;
85                 // break;
86             }
87             else
88             {
89                 cout << "Empty" << endl;
90                 // break;
91             }
92         }
93
94         else if (command == 1)
95         {
96             if (!pq.empty())
97             {
98                 cout << pq.top().name << " " << pq.top().roll << " " << pq.top().marks << endl;
99                 // break;
100             }
101             else
102             {
103                 cout << "Empty" << endl;
104                 // break;
105             }
106         }
107     }
108 }
```

```
100     }
101     else
102     {
103         cout << "Empty" << endl;
104         // break;
105     }
106 }
107
108 else if(command == 2)
109 {
110     if(!pq.empty())
111     {
112         pq.pop();
113     }
114
115     if(!pq.empty())
116     {
117         cout<<pq.top().name<<" " <<pq.top().roll<<" " <<pq.top().marks<<endl;
118         // break;
119     }
120     else
121     {
122         cout<<"Empty"<<endl;
123         // break;
124     }
125 }
126 }
127
128 return 0;
129 }
```