

All Contests > Mid Term Exam | Introduction to Algorithms | Batch 03 > Can Go?

Can Go?

Problem

Submissions

Leaderboard

Discussions

Submitted an hour 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
✓	Test Case #9	✓	Test Case #10	✓	Test Case #11
✓	Test Case #12	✓	Test Case #13	✓	Test Case #14
✓	Test Case #15	✓	Test Case #16	✓	Test Case #17
✓	Test Case #18	✓	Test Case #19	✓	Test Case #20
✓	Test Case #21	✓	Test Case #22		

Submitted Code

Language: C++20 Open in editor

```
1 #include<bits/stdc++.h>
2 using namespace std;
3
4 const int N =1e+5;
5 const int INF = 1e9+7;
6 vector<pair<int,int>> adj[N];
7 vector<int> dist(N,INF);
8 bool visited[N];
9
10
11 void dijkstra(int src)
12 {
13     priority_queue< pair<int,int>, vector< pair<int,int>>, greater<pair<int,int> >> pq;
14     dist[src] = 0;
15     pq.push({dist[src],src});
16
17     while(!pq.empty())
18     {
19         int u = pq.top().second;
20         pq.pop();
21         visited[u] = true;
22
23         for(auto vpair : adj[u])
24         {
25             int v = vpair.first;
```

```
26     int w = vpair.second;
27
28     if(visited[v]) continue;
29
30     if(dist[v] > dist[u] + w)
31     {
32         dist[v] = dist[u] + w;
33         pq.push({dist[v],v});
34     }
35 }
36 }
37 }
38
39 int main()
40 {
41     int n, m ;
42     cin >> n >> m ;
43
44     while(m--)
45     {
46         int u, v, w;
47         cin >> u >> v >> w;
48         adj[u].push_back({v,w});
49     }
50
51     // for(int i = 1; i<=n;i++)
52     // {
53     //     for(auto v : adj[i])
54     //     {
55     //         cout<< "("<< v.first <<","<<v.second <<")" <<" ";
56     //     }
57     //     cout<<endl;
58     // }
59
60     int src;
61     cin >> src;
62     dijkstra(src);
63
64     // for(int i=1; i<=n;i++)
65     // {
66     //     cout<<"Dist of "<<i <<": " <<dist[i]<<endl;
67     // }
68
69     int test;
70     cin >> test;
71     while(test--)
72     {
73         long long int dest, dw;
74         cin >> dest >> dw;
75
76         if(dist[dest] <= dw)
77             cout<<"YES"<<endl;
78         else
79             cout<<"NO"<<endl;
80     }
81
82     return 0;
83 }
84 }
```