



Shortest Distance

Problem

Submissions

Leaderboard

Discussions

Problem Statement

You'll be given a graph of N nodes and E edges. For each edge, you'll be given A , B and W which means there is an edge from A to B only and which will cost W .

Also, you'll be given Q queries, for each query you'll be given X and Y , where X is the source and Y is the destination. You need to print the minimum cost from X to Y for each query. If there is no connection between X and Y , print -1 .

Note: There can be multiple edges from one node to another. Make sure you handle this one.

Input Format

- First line will contain N and E .
- Next E lines will contain A , B and W .
- After that you'll get Q .
- Next Q queries will contain X and Y .

Constraints

1. $1 \leq N \leq 100$
2. $1 \leq E \leq 10^5$
3. $1 \leq A, B \leq N$
4. $1 \leq W \leq 10^9$
5. $1 \leq Q \leq 10^5$
6. $1 \leq X, Y \leq N$

Output Format

- Output the minimum cost for each query.

Sample Input 0

```
4 7
1 2 10
2 3 5
3 4 2
4 2 3
3 1 7
2 1 1
1 4 4
6
1 2
```

```
4 1
3 1
1 4
2 4
4 2
```

Sample Output 0

```
7
4
6
4
5
3
```

Sample Input 1

```
4 4
1 2 4
2 3 4
3 1 2
1 2 10
6
1 2
2 1
1 3
3 1
2 3
3 2
```

Sample Output 1

```
4
6
8
2
4
6
```



Submissions: [314](#)

Max Score: 20

Difficulty: Easy

Rate This Challenge:



[More](#)

C++20



```
1 #include <bits/stdc++.h>
2
3 using namespace std;
4
5
6
7 int main()
8 {
9     // Write your code here
10
11     return 0;
12 }
```