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Distance

Problem

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Problem Statement

You will be given an undirected graph as input. You will be given a query Q , for each query you will be given a source S and a destination D . You need to tell the minimum distance from source to destination for each query.

Note: If there is no path in between the source and destination, print -1.

Input Format

- First line will contain N , the number of nodes and E , the number of edges. The value of nodes will be from 0 to 10^5 .
- Next E lines will contain A, B which means there is a edge between node A and B .
- Next line will contain Q , the number of queries.
- For each query every line will contain S and D .

Constraints

1. $1 \leq N, E \leq 1000$
2. $1 \leq Q \leq 1000$
3. $0 \leq S, D \leq 10^5$

Output Format

- Output the minimum distance from source to destination for each query.

Sample Input 0

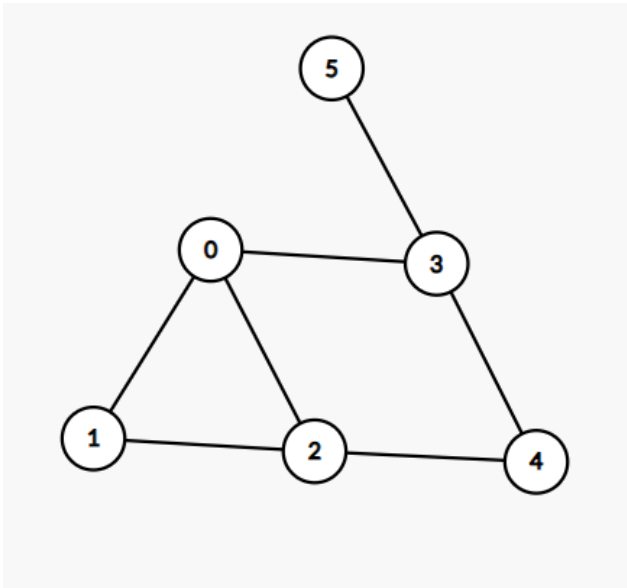
```
6 7
0 1
0 2
1 2
0 3
4 2
3 5
4 3
6
0 5
1 5
2 5
2 3
1 4
0 0
```

Sample Output 0

2
3
3
2
2
0

Explanation 0

In this test case, the graph is given below.



Sample Input 1

```
7 6
0 1
0 2
1 2
0 3
4 2
4 3
4
3 10
2 6
0 6
0 10
```

Sample Output 1

```
-1
-1
-1
-1
```

[f](#) [t](#) [in](#)

Submissions: [187](#)

Max Score: 20

Difficulty: Easy

Rate This Challenge:

☆☆☆☆☆

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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 }
13
```

Line: 1 Col: 1

[Upload Code as File](#) ☐ Test against custom input

Run Code

Submit Code

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