HUSTack

Problem: Week 6 - Shortest Path between 2 nodes on a directed graph with non-negative weights

Description

Given a directed graph G = (V,E) in which V = {1,2,...,n) is the set of nodes. Each arc (u,v) has a non-negative weight w(u,v). Given two nodes s and t of G. Find the shortest path from s to t on G.

Input

- Line 1: contains two integers n and m which are the number of nodes and the number of arcs of G (1 <= n <= 100000)
- Line i + 1(i = 1,2,...,m): contains 3 integers u, v, w in which w is the weight of arc(u,v) (0 <= w <= 100000)
- Line m+2: contains two integers s and t

Output

Write the weight of the shortest path found or write -1 if no path from s to t was found

Example

Input

5 7

2 5 87

1 2 97

4 5 78

3 1 72

1 4 19

2 3 63

5 1 18

1 5

Output

97

Sample TestCase

C 17

```
1  Write your Source code here
```

Source code

C 17

```c
//C
#include <stdio.h>

int main()
{

}
```

SUBMIT CODE

Currently, this contest problem is not open for submissions

Or

C 17

Select file

SUBMIT

Tìm kiếm

ID	Bài tập	Trạng thá
9c6084	SHORTEST_PATH_DIJKSTRA	Accept

5 hàng 1-1 của 1