

# Description

**Problem: P5** 

A shipper visits all points 1, 2, 3, ..., n (each point is visited exactly once) for delivering packages and comes back to the starting point. There is a precedence constraint between points on the route of shipper which is represented by a list of m pairs (i,j): point i must be located before point j on the route (i, j = 1, 2, ..., n). A route of shipper is feasible if it is a permutation of 1, 2, ..., n and satisfies the precedence constraint. The travel distance from point i to point j is d(i,j) (i,j = 1,...,n). Write a program that checks if a sequence  $x_1, x_2, ..., x$ n is a feasible route of the shipper and computes the total travel distance of that route.

### Line 1: contains a positive integer n (1 <= n</li> <= 1000)

Input

- Line 2: contains n positive integers x<sub>1</sub>, x<sub>2</sub>, ..., X n
- Line i + 2 (i = 1,...,n): contains the i<sup>th</sup> row of the distance matrix d
- Line n+3: contains a positive integer m (1 <=</li>  $m \le 1000000$ • Line k + n + 3 (k = 1,...,m): contains two
- i must be located before point j on the route

Write the total travel distance of the route  $x_1$ 

, ...,  $x_n$  if it is feasible, or write -1 if the

positive integers i and j (1  $\leq$  i, j  $\leq$  n): point

# sequence $x_1, ..., x_n$ is not feasible.

Output

**Example** 

## 1234

Input

4

0243

3011

2305

1320

3

12

14

3 4

9

**Output** 

4

Input

4231

0243

# 3011

2305

3

14

Output

Source code

# 1320

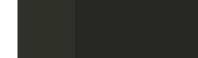
12 3 4

5

{

}

-1



//C++

int main()

SUBMIT CODE

Or

C++17

#include <bits/stdc++.h>

C++ 17

Bài

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ID

**SUBMIT** 

Bài tập

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