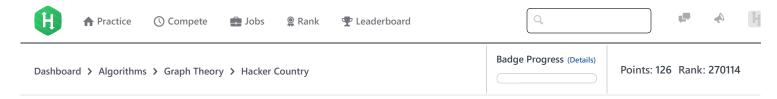
15/11/2017 HackerRank



# Hacker Country **■**



Problem	Submissions	Leaderboard	Discussions	Editorial 🔒

There are *N* cities in *Hacker Country*. Each pair of cities are directly connected by a unique directed road, and each road has its own toll that must be paid every time it is used. You're planning a road trip in *Hacker Country*, and its itinerary must satisfy the following conditions:

- You can start in any city.
- You must use **2** or more different roads (meaning you will visit **2** or more cities).
- At the end of your trip, you should be back in your city of origin.
- The average cost (sum of tolls paid per road traveled) should be minimum.

Can you calculate the minimum average cost of a trip in Hacker Country?

#### **Time Limits**

Time limits for this challenge are provided here.

#### **Input Format**

The first line is an integer, N (number of cities).

The N subsequent lines of N space-separated integers each describe the respective tolls or traveling from city i to city j; in other words, the j<sup>th</sup> integer of the i<sup>th</sup> line denotes the toll for traveling from city i to city j.

**Note:** As there are no roads connecting a city to itself, the  $i^{th}$  integer of line i will always be 0.

#### **Constraints**

 $1 < N \le 500$ 

 $0 < toll \ cost \leq 200$ 

 $roads\ traveled \geq 2$ 

## **Output Format**

Print the minimum cost as a rational number p / q (tolls paid over roads traveled). The greatest common divisor of p and q should be 1.

## **Sample Input**

2

0 1

2 6

## **Sample Output**

3/2

### **Explanation**

The toll from city  $c_0$  to city  $c_1$  is 1. The toll from  $c_1$  to  $c_0$  is 2. Your travel cost p = 1 + 2 = 3. Your number of roads traveled is q = 2. Thus, we print 3/2 as our answer.

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f in
Submissions:496
Max Score:100
Difficulty: Hard
Rate This Challenge:
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```
Current Buffer (saved locally, editable) & 🗘
                                                                                             Java 7
                                                                                                                              \Diamond
 1 ▼ import java.io.*;
 2 import java.util.*;
 3
   import java.text.*;
 4 import java.math.*;
 5
    import java.util.regex.*;
 7 ▼ public class Solution {
 8
 9 ▼
         public static void main(String[] args) {
             /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
10 ▼
11
12
   }
                                                                                                                      Line: 1 Col: 1
                      ☐ Test against custom input
                                                                                                          Run Code
                                                                                                                       Submit Code
1 Upload Code as File
```

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