



HRS MIN SEC

March Circuits '18

LIVE

Mar 17, 2018, 04:30 PM CET - Mar 26, 2018, 05:30 PM CEST

INSTRUCTIONS PROBLEMS SUBMISSIONS LEADERBOARD ANALYTICS JUDGE

← Problems / Missile Bombing

Max. Marks: 100

There is N x N field on which missiles are being bombarded. Initially, all the cells in this field have 0 value. There will be M missiles bombarded on this field. i^{th} missile will have power P_i and it will affect all the cells in region with (A_i, B_i) as top-left cornor and (C_i, D_i) as bottom-right cornor. Because of missile, value of all the cells in this rectangle will get XOR with P_i .

After all the missiles have been bombarded, you have to find out values in each cell of this field.

INPUT:

First line of input will consists integer N. Next line of input will consists of M. Next M lines will contain description of missiles. ith line will contain five integers - P_i, A_i, B_i, C_i, D_i.

OUTPUT:

You have to print the values in the final field. You have to print N lines, with each line containing the N integers. Integer at i^{th} row and j^{th} column should contain the value present at that position in the field.

CONSTRAINTS:

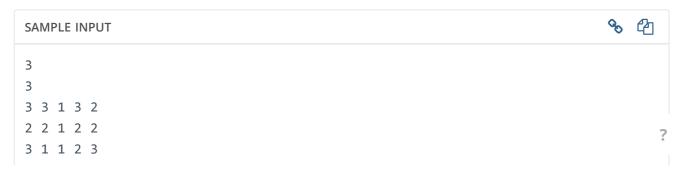
 $1 \le N \le 1000$

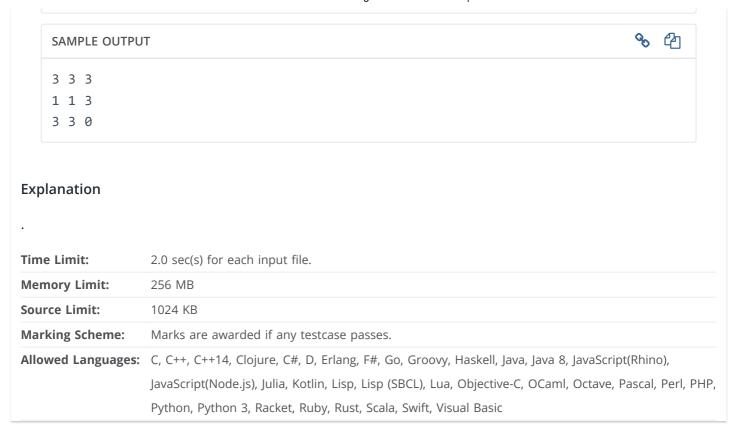
 $1 \le M \le 10^4$

 $1 \le P_i \le 10^5$

 $1 \le A_i \le C_i \le N$

 $1 \le B_i \le D_i \le N$





CODE EDITOR

```
C++14 (g++ 5.4.0)
Enter your code or Upload your code as file.
                                               Save
 1 #include <iostream>
   #include <vector>
    #include <algorithm>
 4
    int main()
 5
 6
         int n; std::cin >> n;
 7
         int m; std::cin >> m;
 8
         std::vector<std::vector<int>> vec(n);
 9
         for(int row = 0; row<n; ++row)</pre>
10
11
             for(int col = 0; col<n; ++col)</pre>
12
                  vec[row].emplace back(0);
13
14
         for(int i = 0; i<m; ++i)</pre>
15
16
17
             int Power, A, B, C, D;
18
             std::cin >> Power >> A >> B >> C >> D;
19
20
             for(int row = A-1; row<C; ++row)</pre>
21
                  for(int col = B-1; col\langle D; ++col \rangle
22
                       vec[row][col] ^= Power;
23
                       //std::cout << vec[row-1][col-1] << std::endl;
24
25
         for(int row = 0; row<n; ++row)</pre>
26
                                                                                           ?
             for(int col = 0; col<n; ++col)</pre>
27
```

■ Provide custom input

? Press Ctrl-space for autocomplete suggestions.

COMPILE & TEST

SUBMIT

Submission ID: 15946086 / 21 seconds ago

RESULT: ⊘ Accepted

Score	Time (sec)	Memory (KiB)	Language
100.0	3.63243	4372	C++14

Input	Result	Time (sec)	Memory (KiB)	Score
Input #1	•	0.109579	64	12
Input #2	•	0.111536	64	12
Input #3	•	0.113257	64	12
Input #4	•	0.780507	4372	12
Input #5	•	0.794005	4372	12
Input #6	•	0.835183	4372	12
Input #7	•	0.784791	4372	12
Input #8	•	0.10357	64	16

Compilation Log

No compilation log for this submission.

***** Tip: You can submit any number of times you want. Your best submission is considered for computing total score.

Your Rating:

COMMENTS (51)

SORT BY: Relevance▼



3

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Typing 9 days ago

how can (3,1) and (3,2) form a rectangle? poor explanation

▲ 5 votes • Reply • Message • Permalink



Jeet Jain 9 days ago

Explanation is clear. (3,1) and (3,2) are positions in the field and at each position we have a cell or a block. So combine two cells and you will get a rectangle.

▲ 5 votes • Reply • Message • Permalink



Gautam Kumar 9 days ago

how to count no of cells?

▲ 0 votes • Reply • Message • Permalink



Rohith Varma M 8 days ago

could you please explain..... Jeet

▲ 0 votes • Reply • Message • Permalink



Ashish Lal 9 days ago

Misleading Constraints. :-/

▲ 3 votes • Reply • Message • Permalink



Ginni Hema Sundara Rao 5 days ago

true

▲ 0 votes • Reply • Message • Permalink



Pratyush Gaurav Jagaty 7 days ago

Are the test cases up to the mark? Because just a brute is passing!

▲ 3 votes • Reply • Message • Permalink



sShuvo Ehsan @ Edited 7 days ago

Dataset is so much poor! Just a simple brute force solution which should take (1000 * 1000) * (10000) in wrost case is passing!

▲ 1 vote • Reply • Message • Permalink



Previn Kumar @ Edited 7 days ago

Hi, But i'm using python3, for 4 testcases timelimit exceeds, Can u suggest me what to do?. Im using 3loops and finally 2 loops for printing in matrix form

▲ 1 vote • Reply • Message • Permalink



Anita Bhadouria 5 days ago

same here, can anyone please suggest, I can't optimize beyond this

▲ 0 votes • Reply • Message • Permalink



sShuvo Ehsan @ Edited 5 days ago

For every query , two loop is enough though . Think easily . Update all the cells from (lx, ly) to (rx, ry) by assuming thats a rectangle . Hope ,it will help you .

▲ 0 votes • Reply • Message • Permalink



Previn Kumar 5 days ago

Thanks for suggestion. I think for sure we need to use three loops(including input line to get missile details). In python 4 testcases failed. But i did the same in C, all testcapassed:)

▲ 0 votes • Reply • Message • Permalink



Ganesh Jadhav 5 days ago

You can solve it in O(1000*10000*log(n)) time. That is in O(10^8).

▲ 0 votes • Reply • Message • Permalink



Ganesh Jadhav 5 days ago

You can solve it in O(1000*10000*log(n)) time. That is in O(10^8). I think this could be a hint.

▲ 0 votes • Reply • Message • Permalink



Hare Krishna 9 days ago

where is explanation????????

▲ 1 vote • Reply • Message • Permalink



Rahul Bansal 8 days ago

please clarify the coordinate system for grid

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Nikesh Shetty 7 days ago

For people who need explanation, simply consider (A,B) and (C,D) equivalent to (rowNum,ColNum)

▲ 1 vote • Reply • Message • Permalink



Nitesh kumar 20 hours ago

only first test case is passing....can anyone explain..why...? rest give runtime error and 2 gives wrong ans

▲ 1 vote • Reply • Message • Permalink



Preetam 4 hours ago

same here bro

▲ 0 votes • Reply • Message • Permalink



Jitender Kumar 9 days ago

where is the explanation man....???

▲ 0 votes • Reply • Message • Permalink



lankesh purekar 9 days ago

does the sample ouput is correct ????

▲ 0 votes • Reply • Message • Permalink



lankesh purekar 9 days ago

sorry, i was worng sample output is ok......

▲ 0 votes • Reply • Message • Permalink



Nitin Bahekar Patil 7 days ago

hao re ...

▲ 0 votes • Reply • Message • Permalink



kishan gaur 9 days ago

where is the explanation?

▲ 0 votes • Reply • Message • Permalink



Haridas 9 days ago

how to create a 2d array of size 1000*1000

▲ 0 votes • Reply • Message • Permalink



Arvind Negi 9 days ago

Create array globally...

▲ 0 votes • Reply • Message • Permalink



Rohith Varma M @ Edited 8 days ago

?

could anybody please explain.....

▲ 0 votes • Reply • Message • Permalink



Pranaykumar Anugurti 8 days ago

error: invalid types 'int[int]' for array subscript getting this error while accesing 2 d array

▲ 0 votes • Reply • Message • Permalink



Kungfu Pandya 8 days ago

take a look at your variables

▲ 0 votes • Reply • Message • Permalink



Anju Rawat 8 days ago

anyone give me more taste cases? because my solution pass only 1st taste case !!

▲ 0 votes • Reply • Message • Permalink



Sayantan Banerjee 8 days ago

where is the explanation?could u please explain the sample test case?

▲ 0 votes • Reply • Message • Permalink



ROMAN REIGNS 8 days ago

where is the explanation?

▲ 0 votes • Reply • Message • Permalink



Akshatha KN 8 days ago

C# compiler is not working. Even the below code is taking Infinite time to compile.

using System;
namespace s3{
class Test{
public static void Main(string[] args){
 Console.WriteLine("Hi");
}
}

Please check.

▲ 0 votes • Reply • Message • Permalink



Akshay Bagal @ Edited 8 days ago

I used same logic (same number of loops) in Python3 and C. with python 3 only 3 cases got passed. while with c , all cases got passed. seems to be problem with python3 interpreter..

▲ 0 votes • Reply • Message • Permalink



Sumit Dubey 8 days ago

could not create compile log for STDOUT?

what does that mean?

▲ 0 votes • Reply • Message • Permalink



Ignacio Monllor 8 days ago

where is the explanation?

▲ 0 votes • Reply • Message • Permalink



Boris Sokolov 8 days ago

The judge system is not stable!

Submission #15732353 gets WA#3 and submission #15732559 gets Accepted. But code is completely the same as well as compiler.

▲ 0 votes • Reply • Message • Permalink



Hrithik Singh 8 days ago

subscripted value is neither array nor pointer nor vector

?

explain

▲ 0 votes • Reply • Message • Permalink



plumber hl 5 days ago

[] is called subscript operator.In Python .you can use it with lists,arrays(vectors)..but if you have used it with

neither of those, it gives that error.

Eg: lst = [1,2,5] ---> lst[1] = 2

a = 522 -----> a[2] = trows an error

Check if you haven't used subscript operator as explained above.

▲ 0 votes • Reply • Message • Permalink



Hrithik Singh 5 days ago

i ve wriiten simply a[i][j] = a[i][j]^p

▲ 0 votes • Reply • Message • Permalink



plumber hl 4 days ago

then a might not be an array/list.check if you have initialized it properly.

▲ 0 votes • Reply • Message • Permalink



kartik chauhan 7 days ago

Explanation

▲ 0 votes • Reply • Message • Permalink



mr.introvert 7 days ago

the same code gives correct output in ide while incorrect output in hacker earth compiler ...!!

▲ 0 votes • Reply • Message • Permalink



abhishek handa 6 days ago

Simple Brute Force Question

▲ 0 votes • Reply • Message • Permalink



Abhishek Ranjan 6 days ago

interesting problem ..

▲ 0 votes • Reply • Message • Permalink



Anant Kumar 4 days ago

Too weak test cases

▲ 0 votes • Reply • Message • Permalink



Waqar Ahmad 3 days ago

passing all test cases even for O(N*N*M) algorithm (was supposed to get TLE). Weak test cases.

▲ 0 votes • Reply • Message • Permalink



KUNWAR DESH DEEPAK SINGH 2 days ago

brute force is working whats the problem???solve it in O(n^3) yhen also all test cases got passed why??????????

▲ 0 votes • Reply • Message • Permalink



Kaustubh D 2 days ago

Which language did you use ? My O(n^3) isn't working

▲ 0 votes • Reply • Message • Permalink

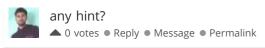


KUNWAR DESH DEEPAK SINGH 2 days ago

i used cpp.

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Preetam 4 hours ago



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