

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP RAYAN 🛣

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

## U. Minimum subarray

time limit per test: 1 second memory limit per test: 256 megabytes

A special grid of size  $N^*N$  is a grid that any column i  $(1 \le i \le N)$  has l and r where all the elements in it are 1 except the elements in the rows from l to r are 0, for Example:

1	1	1	1	1
1	0	1	0	1
0	0	0	0	0
0	1	0	1	0
1	1	1	1	1

Given a special grid A of size  $N^*N$  and you have to print the minimum sum you can get if you take a subgrid from A of size  $H^*N$ .

## Input

The first line of input contains one integer T ( $1 \le T \le 10^6$ ) the number of test cases.

The first line of each test case contains two integers N,H ( $1 \leq H \leq N \leq 10^6$ ).

Then N lines, where the  $i_{th}$  line contains two integers l,r  $(1 \leq l \leq r \leq N)$  of the  $i_{th}$  column.

1 ≤ sum of N over all test cases  $\leq 10^6$ 

## **Output**

Print T lines, where the  $i_{th}$  line contains one integer number x, where x is the answer of the  $i_{th}$  test case

## **Example**

input	Сору
2	
4 3	
2 3	
2 3	
2 3	
2 3	
5 2	
3 4	
2 3	
3 4	
2 3	
3 4	
output	Сору
4	
2	

## Note

The second test case:

The grid is:

11111

10101

00000

01010

11111

#### <u>ICPC Assiut University Training -</u> <u>Juniors Phase 1 Sheets-2022</u>

#### **Public**

#### **Participant**



## **→ Group Contests**



- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- search , Two pointers )Juniors Phase 1 Practice #3 ( STL 2 )

• Juniors Phase 1 Practice #4 ( Binary

- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 ( Prefix sum , Frequency Array )

# <u>Juniors Phase 1 Practice #1 (</u> <u>Prefix sum , Frequency Array )</u>

#### **Finished**

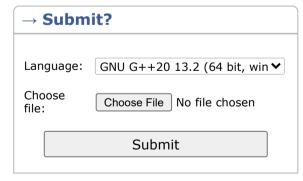
#### Practice



## → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you -solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you -solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

# Start virtual contest



→ Last submissions				
Submission	Time	Verdict		
305412377	Feb/10/2025 08:53	Accepted		
305410591	Feb/10/2025 08:39	Accepted		
305404313	Feb/10/2025 07:41	Time limit exceeded on test 2		

## Ther is three grid are:

• The first subgrid is: 11111

10101

The sum = 8

• The second subgrid is:

10101

00000

The sum = 3

• The third subgrid is: 00000

01010

The sum = 2

• The Fourth subgrid is:

01010

11111

The sum = 7

So the answer is: 2

Codeforces (c) Copyright 2010-2025 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Feb/28/2025 10:41:24<sup>UTC+2</sup> (h2).
Desktop version, switch to mobile version.

Privacy Policy

Supported by



