

Problem

Result



Minimum Turns

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Navdeep wants to buy land on CodingNinjasLand where he will build a house for his family. So far, he's seen K pieces of land. Each of them is in the shape of a rectangle and we can think of it as a matrix with N rows and M columns, $N \times M$ fields in total in one land. Navdeep is aware that, before construction begins, the property needs to be regularly maintained and the lawn needs to be mowed. Because of this, Navdeep bought a lawn mower. In order to mow the entire lawn of N rows and M columns, he needs to go over each field at least once. He can start from any field facing one of the four main directions (up, down, left, and right). His lawn mower can only go forwards (to the adjacent field facing the current direction) or make a 90 degree turn. Additionally, because of his own safety, Navdeep can only use the lawn mower on his land, so he cannot leave the matrix. Since making the lawn mower turn isn't simple, Navdeep wants to mow the lawn with the minimal amount of turns. For each piece of land he saw so far, Navdeep wants to know the minimal number of turns he can make so that the entire lawn is mowed. Help Navdeep solve this problem.

Input Format :

The first line of input contains the positive integer K ($1 \leq K \leq 50\,000$), the number from the task. Each of the following K lines contains two positive integers

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main() {
4
5     // Write your code here
6 }
```

piece of land he saw so far, Navdeep wants to know the minimal amount of turns he can make so that the entire lawn is mowed. Help him solve this problem.

Input Format :

The first line of input contains the positive integer K ($1 \leq K \leq 50\,000$), the number from the task. Each of the following K lines contains two positive integers N and M ($1 \leq N, M \leq 1\,000\,000$), the numbers from the task.

Output Format :

For each piece of land Navdeep saw so far, output in a separate line the minimal amount of turns he can take so that the entire lawn is mowed.

Sample Input 1 :

```
2
1 10
10 1
```

Sample Output 1 :

```
0
0
```

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main() {
4
5     // Write your code here
6 }
```



2

ProblemResult

10 1

Sample Output 1 :

```
0
0
```

Sample Input 2 :

```
3
1 1
3 3
3 4
```

Sample Output 2 :

```
0
4
4
```

Clarification of the first test case: The first piece of land can be mowed without making any turns if he starts from the field in the first column of the table, faced to the right and only going forwards. A similar idea applies for the second piece of land.

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main() {
4
5     // Write your code here
6 }
```

