

Day 74 coding Statement :

You have a grid with N rows and M columns. You have two types of tiles — one of dimensions 2×2 and the other of dimensions 1×1 . You want to cover the grid using these two types of tiles in such a way that:

- Each cell of the grid is covered by exactly one tile; and
- The number of 1×1 tiles used is minimized.

Find the **minimum** number of 1×1 tiles you have to use to fill the grid.

Input Format

- The first line of input will contain a single integer T , denoting the number of test cases.
- Each test case consists of a single line containing two space-separated integers N, M .

Output Format

For each test case, print on a new line the minimum number of 1×1 tiles needed to fill the grid.

Sample Input

4

1 1

4 5

6 8

3 2

Sample Output

1

4

0

2

```

import java.util.*;
import java.lang.*;
import java.io.*;
public class Program
{
    public static void main (String[] args) throws java.lang.Exception
    {
        Scanner sc=new Scanner (System.in);
        int t=sc.nextInt();
        while (t-->0){

            int n=sc.nextInt();
            int m=sc.nextInt();

            if(n%2==0&&m%2==0){
                System.out.println(0);
            }
            else if(n%2==0&&m%2!=0){
                System.out.println(n);
            }
            else if(n%2!=0&&m%2==0){
                System.out.println(m);
            }
            else{
                System.out.println(m+n-1);
            }
        }
    }
}

```