

2925 - Help with the Remote

Description

Ted's TV remote control is broken, well, not totally broken, there are some malfunctioning keys. Particularly, the Volume minus key does not work. However, there is a special key on the control which can cut the TV current volume by half. Ted can the Volume Plus key to higher the volume by one. So Ted is wondering, given the TV current volume, what is the least amount of keys he must press in order to change it desired volume.

Input specification

First line of input contains an integer T, the number of test cases, T lines will follow, each with two integers, A and B.

Output specification

For every line of input, output a single line with a single integer, the least amount of key presses he must make to change volume from A to B.

Sample input

```
2
11 12
11 5
```

Sample output

```
1
1
```

Hint(s)

Note that when the volume is odd, its half is the result of the integer division by two.

Source

Added by

chaplin

Addition date

2014-05-19

Time limit (ms)

2000

Caribbean Online Judge

Test limit (ms)	1000
Memory limit (kb)	65536
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text