Absecutive

Input file:	standard input
Output file:	standard output
Time limit:	0.25 seconds
Memory limit:	4 megabytes

A pair of integers is considered good if the magnitudes of its elements differ by one. For example, the pair $(0, 1)$ is good, whereas $(-1, 1)$ is not. Note that the order of elements in the pair is unimportant.

Given two integers, l and r, determine how many (possibly non-disjoint) good pairs exist in the interval between and including them.

Input

The first line of the input contains a single integer, t $(1 \leq t \leq 1000)$ — the number of test cases.

The only line of each test case contains two integers, l and r $(-10^9 \leq l \leq r \leq 10^9)$ — the bounds of the interval.

Output

For each test case, output a single integer — the number of pairs of integers within the given interval, such that their magnitudes differ by one.

Example

standard input	standard output
5	0
1 1	1
0 1	2
-1 1	4
-1 2	6
-2 2	

Note

In the first test case, no good pair exists.

In the second test case, the only pair is $(0, 1)$ and it is good. Note that $(1, 0)$ is equivalent.

In the third test case, two good pairs exist, namely: $(-1, 0)$ and $(0, 1)$.