

Absecutive

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Su is preparing a lesson on integers for her beloved students. She will give each student a **consecutive** integer starting from l and ending at r . Then, she will ask students to form pairs according to the following rule:

- Two students can form a pair only if the magnitudes of their numbers differ by one.

In anticipation of the class, she wants to know how many (possibly **non-disjoint**) pairs could be formed.

Input

The first line of the input contains a single integer, t ($1 \leq t \leq 10^3$) — 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 lower and upper bounds of the interval, respectively.

Output

For each test case, output a single integer — the number of pairs of integers within the interval $[l, r]$, 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, there can be no pairs.

In the second test case, only one pair can be formed, namely: $(0, 1)$. Note that the pair $(1, 0)$ is equivalent.

In the third test case, two pairs can be formed: $(-1, 0)$ and $(0, 1)$.