Cube 3x3x3

Usually in any contest of ICPC, there should be at least one problem which every contestant could answer.

Given T, following by T lines of two integer A, B.

Count how many integer N satisfied $A \leq N^3 \leq B$.

Constraints

$1 \leq T \leq 100$

$1 \leq A \leq B \leq 10^{12}$

Sample Input

```
2
7 17
25 100
```

Sample Output

```
Case #1: 1
Case #2: 2
```

Sample Case Explanation

For 1st sample case, there is N = {2}, which satisfied the equation.
For 2nd sample case, there are N = {3, 4}, which satisfied the equation.