

The 2025 ICPC Asia HCMC Regional Contest



HCMC University of Technology – 12 December 2025

Group Raiding

Uorld wof Uarcraft (UwU) is one of the largest MMORPG in the world. One prominent activity in UwU, as with every other MMORPG, is group raiding, where players form parties to take on one or several powerful bosses. Today, RR and Ming were supposed to lead a party of 69 players in a raid against one of the most powerful bosses in the game, but since the other 67 did not show up, the raid was called off. To not waste their preparation, RR and Ming decided to raid Harmony — one of the easier bosses instead.

Since Harmony is way beneath RR and Ming's level, it inflicts negligible damage to both of them. On the other hand, it is quite formidable defensively. At the start of the raid, Harmony has n HP and a damage limiter value x. Any skill, no matter how powerful, can only deal at most x damage to Harmony. After Harmony takes a hit losing y HP $(1 \le y \le x)$, it will update its damage limiter value to $L(y) = \sum_{k=1}^{y} \left\lfloor \frac{y}{k} \right\rfloor$, where $\lfloor m \rfloor$ is the largest integer not exceeding m.

Note that all HP and damage values are **positive integers**.

Now, this does not trouble RR and Ming at all. Both are strong enough to deal any amount of damage to Harmony (up to its *damage limiter value*) as they please. However, the one who deals the killing blow (i.e. one that reduces Harmony's HP to 0) will get most of the loot. Both have agreed to take turns hitting Harmony, with Ming getting to choose who goes first. Ming wonders whether he should go first or second to guarantee having the killing blow, given perfect play by both players. Please help him!



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Input

The first line contains an integer τ $(1 \le \tau \le 10^5)$ – the number of test cases. τ test cases follow, each is presented by a single line with two integers n and x $(1 \le x \le n \le 10^{14})$ — Harmony's initial HP and damage limiter value.

Output

For each test case, if the first player can guarantee having the killing blow, output First. Otherwise, output Second.

Sample Input 1	Sample Output 1
4	Second
2 1	Second
8 3	First
10 3	First
10000000000000 10000000000000	

Sample Explanation

In the first test case, the first player must deal 1 damage to Harmony, yielding the killing blow to the second player.

In the second test case, the second player can secure the killing blow as follows:

- If the first player deals 1 damage on the first turn, since L(1) = 1, both players are forced to deal 1 damage until Harmony is defeated, with the killing blow going to the second player.
- If the first player deals 2 damage on the first turn, since L(2) = 3, the second player can deal 2 damage. Then:
 - If the first player deals 1 damage on the next turn, both players are forced to deal 1 damage until Harmony is defeated, with the killing blow going to the second player.
 - If the first player deals 2 or 3 damage on the next turn, the second player can deal 2 or 1 damage, respectively, killing Harmony.
- If the first player deals 3 damage on the first turn, since L(3) = 5, the second player can deal 5 damage, killing Harmony.

In the third test case, the first player can secure the killing blow by dealing 2 damage on the first turn, then using the same strategy as the second player in the second test case.

In the fourth test case, the first player can deal 10^{14} damage, killing Harmony immediately.