Powers Game

HackerRank

After their success in coming up with *Fun Game*, Kyle and Mike invented another game having the following rules:

- The game starts with an n-element sequence, $*2^1 * 2^2 * 2^3 * \ldots * 2^n$, and is played by two players, P_1 and P_2.
- The players move in alternating turns, with P_1 always moving first. During each move, the current player chooses one of the asterisks (*) in the above sequence and changes it to either a `+` (plus) or a `-` (minus) sign.
- The game ends when there are no more asterisks (*) in the expression. If the evaluated value of the sequence is divisible by 17, then P_2 wins; otherwise, P_1 wins.

Given the value of n, can you determine the outcome of the game? Print **First** if P_1 will win, or **Second** if P_2 will win. Assume both players always move optimally.

Input Format

The first line of input contains a single integer T, denoting the number of test cases. Each line i of the T subsequent lines contains an integer, n, denoting the maximum exponent in the game's initial sequence.

Constraints

- $1 \leq T \leq 10^6$
- $1 \leq n \leq 10^6$

Output Format

For each test case, print either of the following predicted outcomes of the game on a new line:

- Print **First** if P_1 will win.
- Print **Second** if P_2 will win.

Sample Input

```
1
2
```

Sample Output

```
First
```

Explanation

In this case, it doesn't matter in which order the asterisks are chosen and altered. There are 4 different courses of action and, in each one, the final value is not divisible by 17 (so P_2 always loses and we print

`First` on a new line).

Possible options:

1. $+2^1 + 2^2 = 6$
2. $+2^1 - 2^2 = -2$
3. $-2^1 + 2^2 = 2$
4. $-2^1 - 2^2 = -6$