



# Powers Game

by alllleksssa

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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,  $*2^1 * 2^2 * 2^3 * \dots * 2^n$ , 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:

- $+2^1 + 2^2 = 6$

2.  $+2^1 - 2^2 = -2$

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

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

[f](#) [t](#) [in](#)Submissions: [648](#)

Max Score: 50

Difficulty: Medium

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☆☆☆☆☆

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Java 7  

```
1 import java.io.*;
2 import java.util.*;
3 import java.text.*;
4 import java.math.*;
5 import java.util.regex.*;
6
7 public class Solution {
8
9     public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
11     }
12 }
```

Line: 1 Col: 1

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