# **Stone Division**



Consider the following game:

- There are two players, *First* and *Second*, sitting in front of a pile of *n* stones. *First* always plays first.
- There is a set, S, of m distinct integers defined as  $S = \{s_0, s_1, \ldots, s_{m-1}\}$ .
- The players move in alternating turns. During each turn, a player chooses some  $s_i \in S$  and splits one of the piles into exactly  $s_i$  smaller piles of equal size. If no  $s_i$  exists that will split one of the available piles into exactly  $s_i$  equal smaller piles, the player loses.
- Both players always play optimally.

Given n, m, and the contents of S, find and print the winner of the game. If First wins, print Second.

#### **Input Format**

The first line contains two space-separated integers describing the respective values of n (the size of the initial pile) and m (the size of the set).

The second line contains m distinct space-separated integers describing the respective values of  $s_0, s_1, \ldots, s_{m-1}$ .

#### **Constraints**

- $1 \le n \le 10^{18}$
- $1 \le m \le 10$
- $2 < s_i < 10^{18}$

## **Output Format**

Print First if the First player wins the game; otherwise, print Second.

## Sample Input 0

15 3 5 2 3

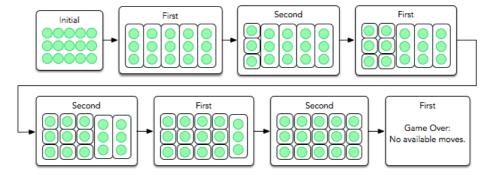
## Sample Output 0

Second

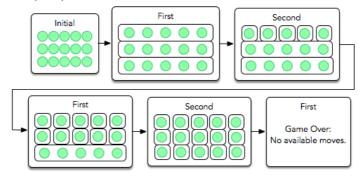
#### **Explanation 0**

The initial pile has n=15 stones, and  $S=\{5,2,3\}$ . During First's initial turn, they have two options:

1. Split the initial pile into **5** equal piles, which forces them to lose after the following sequence of turns:



2. Split the initial pile into  $\bf 3$  equal piles, which forces them to lose after the following sequence of turns:



Because *First* never has any possible move that puts them on the path to winning, we print Second as our answer.