Educational DP Contest AtCoder K - Stones

Time limit: 1.0s **Memory limit:** 1G

There is a set $A = \{a_1, a_2, \ldots, a_N\}$ consisting of N positive integers. Taro and Jiro will play the following game against each other.

Initially, we have a pile consisting of K stones. The two players perform the following operation alternately, starting from Taro:

- Choose an element x in A, and remove exactly x stones from the pile.

A player loses when he becomes unable to play. Assuming that both players play optimally, determine the winner.

Constraints

- All values in input are integers.
- $1 \leq N \leq 100$
- $1 \leq K \leq 10^5$
- $1 \leq a_1 < a_2 < \cdots < a_N \leq K$

Input Specification

The first line will contain 2 space separated integers N, K.

The next line will contain N space separated integers, $a_1, a_2, \ldots, a_N$.

Output Specification

If Taro will win, print `First`; if Jiro will win, print `Second`.

Sample Input 1

```
2 4
2 3
```

Sample Output 1

```
First
```

Explanation For Sample 1

If Taro removes three stones, Jiro cannot make a move. Thus, Taro wins.

Sample Input 2

```
2 5
2 3
```

Sample Output 2

```
Second
```

Explanation For Sample 2

Whatever Taro does in his operation, Jiro wins, as follows:

- If Taro removes two stones, Jiro can remove three stones to make Taro unable to make a move.
- If Taro removes three stones, Jiro can remove two stones to make Taro unable to make a move.

Sample Input 3

```
2 7
2 3
```

Sample Output 3

```
First
```

Explanation For Sample 3

Taro should remove two stones. Then, whatever Jiro does in his operation, Taro wins, as follows:

- If Jiro removes two stones, Taro can remove three stones to make Jiro unable to make a move.
- If Jiro removes three stones, Taro can remove two stones to make Jiro unable to make a move.

Sample Input 4

```
3 20
1 2 3
```

Sample Output 4

```
Second
```

Sample Input 5

```
3 21
1 2 3
```

Sample Output 5

```
First
```

Sample Input 6

```
1 100000
1
```

Sample Output 6

```
Second
```