Barcelona
Problem ID: a10p03barcelona


Image from flickr.com

Arnar, Benni and Unnar were at the airport in Barcelona on their way to a competitive programming training camp. When the plane had landed they exited and went to the baggage claim. When they arrived there was no baggage on the conveyor belts. After a few minutes the baggage started trickling in. When Benni noticed this he loudly proclaimed "My bag's first! No, it's second first! No... it's fourth first. No wait..."

Given a list of bags and a number denoting Benni's bag, can you help Benni find how first his bag is?

Input

First there is a line with two integers n and k, the number of bags and Benni's bag. It will always hold that $1 \leq n \leq 10^5$ and $-10^9 \leq k \leq 10^9$. Next there is a line with n integers separated by spaces, $a_1, a_2, \ldots, a_n$. For each $1 \leq i \leq n$ it holds that $-10^9 \leq a_i \leq 10^9$. No two bags are given by the same number and Benni's bag always appears in the list.

Output

Print a single line. If Benni's bag is first print `fyrst`, if it's the second print `naestfyrst`. Otherwise print a single number denoting how first it is followed by the word `fyrst` after the number.

Scoring

Group	Points	Constraints
1	10	$1 \leq n \leq 100$
2	90	No further constraints

Sample Input 1

```
8 0
0 -1 2 -3 4 -5 6 -7
```

Sample Output 1

```
fyrst
```

Sample Input 2

```
5 42
1337 42 -6 9 420
```

Sample Output 2

```
naestfyrst
```

Sample Input 3

```
7 7
1 2 3 4 5 6 7
```

Sample Output 3

```
7 fyrst
```