



The Survivor

Problem Code: **THESURV**

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There are N convicts standing in a circle. The Marshall of the army points at a fixed index. In each step, the army marshal eliminates every k -th convict in the circle, moving in the same direction at all times. The direction should follow the order in which the nodes were entered, i.e. in the increasing order of indices, with the head node indexed as 1.

The counting for the next convict to be eliminated begins from the index just after the last convict eliminated. (For the first person, the elimination begins from the first index where the marshal points).

Given an integer N , the names of N convicts, and another integer k , print out the name of the convict who survives till the end.

Input:

- First line contains N and k respectively.
- The next line contains N nodes having the names of N convicts.

Output:

Single line of output containing the name of the convict that survives in the end.

Constraints

- $1 \leq N \leq 50$
- $1 \leq k \leq N$

Sample Input:

```
7 3
```

```
Amy Bob Charlie Donald Emma Fil Gary
```

Sample Output:

```
Donald
```

EXPLANATION:

- First step eliminates Charlie
- Next step eliminates Fil
- Next step eliminates Bob
- Next step eliminates Gary
- Next step eliminates Emma
- Last step eliminates Amy and hence Donald survives in the end

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Source Limit: 50000 Bytes

Languages: C, CPP14, JAVA, PYTH, PYTH 3.6

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CodeChef was created as a platform to help programmers make it big in the world of **algorithms**, **computer programming**, and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and two smaller programming challenges at the middle and end of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

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