

B. Game of Robots

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

In late autumn evening n robots gathered in the cheerful company of friends. Each robot has a unique identifier — an integer from 1 to 10^9 .

At some moment, robots decided to play the game "Snowball". Below there are the rules of this game. First, all robots stand in a row. Then the first robot says his identifier. After that the second robot says the identifier of the first robot and then says his own identifier. Then the third robot says the identifier of the first robot, then says the identifier of the second robot and after that says his own. This process continues from left to right until the n -th robot says his identifier.

Your task is to determine the k -th identifier to be pronounced.

Input

The first line contains two positive integers n and k ($1 \leq n \leq 100\,000$, $1 \leq k \leq \min(2 \cdot 10^9, n \cdot (n + 1) / 2)$).

The second line contains the sequence id_1, id_2, \dots, id_n ($1 \leq id_i \leq 10^9$) — identifiers of robots. It is guaranteed that all identifiers are different.

Output

Print the k -th pronounced identifier (assume that the numeration starts from 1).

Examples

input
2 2 1 2
output
1
input
4 5 10 4 18 3
output
4

Note

In the first sample identifiers of robots will be pronounced in the following order: 1, 1, 2. As $k = 2$, the answer equals to 1.

In the second test case identifiers of robots will be pronounced in the following order: 10, 10, 4, 10, 4, 18, 10, 4, 18, 3. As $k = 5$, the answer equals to 4.

Codeforces Round #350 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.


Start virtual contest

→ Problem tags

implementation

No tag edit access

→ Contest materials

- Announcement 
- Tutorial 