Problem 5: One Dimension

Statement

When the chamber of secrets was opened once again and students were getting attacked by the monster inside the chamber. Pr. Snape came up with this idea to check if the heir of Slytherin (the one who opened the chamber) is one of the students, he decided to do the following:

He aligned his students in one line, then cast a spell that rearranged them as a matrix (n×m), each student is represented by an index *(i,j)* of that matrix.

Help Pr. Snape to find the one responsible for these horrible incidents.

Note: the indices starts from 0

Input

A sequence of names, denoting the students forming the line.

The next two lines represent respectively n, m, i and j.

Output

the element in the Position [I,j]

Example

Input	Output
Harry Ron Neville Jenni Draco Hermione 2 3 2 1	Jenni