You are given a square grid with some cells open (**.**) and some blocked (**X**). Your playing piece can move along any row or column until it reaches the edge of the grid or a blocked cell. Given a grid, a start and an end position, determine the number of moves it will take to get to the end position.

For example, you are given a grid with sides $n = 3$ described as follows:

```
...
.X.
...
```

Your starting position $(startX, startY) = (0, 0)$ so you start in the top left corner. The ending position is $(goalX, goalY) = (1, 2)$. The path is $(0, 0) \rightarrow (0, 2) \rightarrow (1, 2)$. It takes 2 moves to get to the goal.

Function Description

Complete the *minimumMoves* function in the editor. It must print an integer denoting the minimum moves required to get from the starting position to the goal.

minimumMoves has the following parameter(s):

- *grid*: an array of strings representing the rows of the grid
- *startX*: an integer
- *startY*: an integer
- *goalX*: an integer
- *goalY*: an integer

Input Format

The first line contains an integer n, the size of the array *grid*.
Each of the next n lines contains a string of length n.
The last line contains four space-separated integers, $\text{startX}, \text{startY}, \text{goalX}, \text{goalY}$

Constraints

- $1 \le n \le 100$
- $0 \le startX,\ startY,\ goalX,\ goalY < n$

Output Format

Print an integer denoting the minimum number of steps required to move the castle to the goal position.

Sample Input

```
3
.X.
.X.
...
0 0 0 2
```

Sample Output

```
3
```

Explanation

Here is a path that one could follow in order to reach the destination in 3 steps:

$(0, 0) \rightarrow (2, 0) \rightarrow (2, 2) \rightarrow (0, 2)$.