

Castle on the Grid



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, *startX*, *startY*, *goalX*, *goalY*

Constraints

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

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 2
```

Sample Output

```
3
```

Explanation

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

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