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 a goal, determine the minmum number of moves to get to the goal.

Example.

```
egin{aligned} grid &= ['...', '.X.', '...'] \ start X &= 0 \ start Y &= 0 \ goal X &= 1 \ goal Y &= 2 \end{aligned}
```

The grid is shown below:

```
...
.x.
...
```

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

Function Description

Complete the *minimumMoves* function in the editor.

minimumMoves has the following parameter(s):

- string grid[n]: an array of strings that represent the rows of the grid
- int startX: starting X coordinate
- int startY: starting Y coordinate
- int goalX: ending X coordinate
- int goalY: ending Y coordinate

Returns

• *int:* the minimum moves to reach the goal

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

• $1 \le n \le 100$

• $0 \le startX$, startY, goalX, goalY < n

Sample Input

Sample Output

```
3
```

Explanation

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