DWITE '07 R4 #4 - Shortest path around

Time limit: 1.0s **Memory limit:** 64M

DWITE Online Computer Programming Contest, January 2008, Problem 4

Sometimes an open field could be as much of a maze as narrow tunnels. Given an obstacle in an otherwise empty room, what is the shortest path around it?

The input file will contain five sets of data, each a 10 by 10 character matrix. There will be a line of 10 dashes after each set, to visually delimit sets of data. The character representations are as follows:

- `.` - empty space
- `#` - wall
- `X` - one of the ends

The output will contain five lines – each an integer distance between the two points marked with X.

There will always be only two X spots per set. There will always be a valid path. Valid steps are into any adjacent empty space; *diagonal steps are legal*. Refer to sample data for examples.

Sample Input

```
..........
..........
..........
....#.....
....#.....
X...#...X.
....#.....
....#.....
..........
..........
----------
..........
..........
........#.
........#.
X...#####X
...#......
..#.......
..........
..........
..........
----------
```

Sample Output

```
8
9
```

Problem Resource: DWITE