

DWITE '08 R4 #4 - Shortest path around v2

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

DWITE Online Computer Programming Contest, January 2009, 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 will contain five sets of data, each an 8×8 character map. The character representations are as follows:

- `.` - empty space
- `#` - wall
- `A` - start
- `B` - end

The output will contain five lines – each the shortest integer distance between `A` and `B`.

Notes: There will always be a valid path. Valid steps are into any adjacent empty space; *diagonal steps are valid*. Refer to sample data for examples.

Sample Input

```
.....  
...#...  
...#...  
A...#..B  
...#...  
...#...  
.....  
.....  
.....#.  
.....#.  
.....#.  
.....#.  
A..####B  
..#.....  
.##.....  
.##.....
```

Sample Output

7

7

Problem Resource: [DWITE](#)