DWITE '09 R4 #5 - Ice Maze

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

DWITE Online Computer Programming Contest, January 2010, Problem 5

Yes, it's a maze, but it's one of those fancy puzzle mazes where there is no friction on the floor and one must bump into walls to stop.

- `#` — wall
- `.` — frictionless open space
- `A` - `F` — points of interest

You will start at a point of interest, and must traverse to the next point in alphabetical order. You may only travel in straight lines, and will continue to slide until there is a `#` wall directly in front of the path. Once stopped, you can push off in any of 4 directions. Assume that the maze's boundary is surrounded by walls.

The objective is to **stop** at the target, not simply slide through it.

For example, in a distance of 13. Note that arrows are to illustrate the shortest path, and will not actually be in the data file.

```
A>>>#
###v#
^>>B#
<<<v#
...##
```

The input will contain a single 10×10 maze as described above.

The output will contain 5 integers, distance travelled from **starting** at a point of interest to **stopping** at the next. That is, sets A-B, B-C, C-D, D-E, E-F.

Sample Input

```
A....E...B
..........
..........
..........
..........
..........
F.........
#.........
......#...
.....D...C
```

Sample Output

```
9
9
16
9
11
```

Problem Resource: DWITE