



# 杭州电子科技大学

**HANGZHOU DIANZI UNIVERSITY**

**Online Judge**



Online Judge	Online Exercise	Online Teaching	Online Contests	Exercise Author
<a href="#">F.A.Q</a> <a href="#">Hand In Hand</a> <a href="#">Online Acmers</a> <a href="#">Forum   Discuss</a> <a href="#">Statistical Charts</a>	<a href="#">Problem Archive</a> <a href="#">Realtime Judge Status</a> <a href="#">Authors Ranklist</a>	<a href="#">C/C++/Java Exams</a> <a href="#">ACM Steps</a> <a href="#">Go to Job</a> <a href="#">Contest LiveCast</a> <a href="#">ICPC@China</a>	<b>Best Coder</b> <small>beta</small> <a href="#">VIP   STD Contests</a> <a href="#">Virtual Contests</a> <a href="#">DIY   Web-DIY</a> <small>beta</small> <a href="#">Recent Contests</a>	 <b>用QQ帐号登录</b>  <a href="#">Author ID</a> <a href="#">Password</a> <a href="#">Register new ID</a>

如何参加“HDOJ暑期多校联合训练”? 请加QQ群837241962咨询~

## Red and Black

**Time Limit:** 2000/1000 MS (Java/Others)    **Memory Limit:** 65536/32768 K (Java/Others)  
**Total Submission(s):** 29825    **Accepted Submission(s):** 18042

### Problem Description

There is a rectangular room, covered with square tiles. Each tile is colored either red or black. A man is standing on a black tile. From a tile, he can move to one of four adjacent tiles. But he can't move on red tiles, he can move only on black tiles.

Write a program to count the number of black tiles which he can reach by repeating the moves described above.

### Input

The input consists of multiple data sets. A data set starts with a line containing two positive integers W and H; W and H are the numbers of tiles in the x- and y-directions, respectively. W and H are not more than 20.

There are H more lines in the data set, each of which includes W characters. Each character represents the color of a tile as follows.

'.' - a black tile  
'#' - a red tile  
 '@' - a man on a black tile(appears exactly once in a data set)

### Output

For each data set, your program should output a line which contains the number of tiles he can reach from the initial tile (including itself).

### Sample Input

```
6 9
...#.
.....
.....
.....
.....
.....
.....
#@...#
.#..#.
11 9
.#.....
.#####.
.###...#.
.###.###.
.###.@#.
.#####.
.#.....
.#####.
.....
11 6
..#.#.#..
..#.#.#..
..#.#.###
..#.#.#@.
..#.#.#..
..#.#.#..
7 7
..#.#..
..#.#..
```

```
###.###
...@...
###.###
...#...
...#...
...#...
0 0
```

Sample Output

```
45
59
6
13
```

Source

Asia 2004, Ehime (Japan), Japan Domestic

Recommend

Eddy

[Statistic](#) | [Submit](#) | [Discuss](#) | [Note](#)

[Home](#) | [Top](#)

Hangzhou Dianzi University Online Judge 3.0  
Copyright © 2005-2019 [HDU ACM Team](#). All Rights Reserved.  
[Designer & Developer](#) : [Wang Rongtao](#) [LinLe](#) [GaoJie](#) [GanLu](#)  
[Total 0.015601\(s\) query 2, Server time : 2019-07-17 19:09:41, Gzip disabled](#)

[Administration](#)