h

03 : 21 : 29 : 17
DAY   HRS   MIN   SEC

June Circuits '20

LIVE

Jun 20, 2020, 09:30 PM IST - Jun 27, 2020, 09:30 PM IST

INSTRUCTIONS   PROBLEMS   SUBMISSIONS   LEADERBOARD   ANALYTICS   JUDGE

← Problems / Inverted cells

Inverted cells

Max. score: 100

Given matrix $n * m$. We assume that the matrix rows are numbered from 1 to n from top to bottom, and the matrix columns are numbered from 1 to m from left to right. Then the cell of the field at the intersection of the x-th row and the y-th column has coordinates (x, y).

Every cell is empty or blocked. For every cell (x, y) determine if we change the state of the cell (x, y)(empty to blocked or blocked to empty), is it possible to reach cell (n, m) from $(1, 1)$ and going only down and right .

Input format

- First line contains two space-seperated numbers n, m - number of rows and columns.
- Next n lines contains m symbols. If symbol on (x, y) is '#', cell is blocked, else if symbol is '.', cell is empty.

Output format

- Print n lines, where every line contains m numbers. Print 0 if it is impossible to reach (n, m), otherwise print 1.

Constraints

- $1 \leq n, m \leq 10^3$

SAMPLE INPUT

```
5 5
..#..
#...#
#...#
....#
.##..
```

SAMPLE OUTPUT

```
0 0 1 1 1
1 0 1 1 1
1 1 1 1 1
1 1 1 0 1
1 1 1 0 0
```

Explanation

If we blocked cell $(1, 1)$ or $(5, 5)$, it is obvious that the answer won't exist.

If we blocked cell $(1, 2)$ or $(2, 2)$, from the left-top corner, we cant achieve cell $(5, 5)$, since all paths are blocked off.

If we blocked cell $(5, 4)$ or $(4, 5)$, all possible passes from $(5, 5)$ are blocked off.

Time Limit:	2.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned if any testcase passes.
Allowed Languages:	Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic

CODE EDITOR

Save   C (gcc 5.4.0)   ⌄   ↗   ⚙

```c
1   /*
2   // Sample code to perform I/O:
3   #include <stdio.h>
4
5   int main(){
6       int num;
7       scanf("%d", &num);                    // Reading input from STDIN
8       printf("Input number is %d.\n", num);     // Writing output to STDOUT
9   }
10
11  // Warning: Printing unwanted or ill-formatted data to output will cause the test
    cases to fail
12  */
13
14  // Write your code here
15
```

?

1:1 vscode

 ▼ Provide custom input

| COMPILE & TEST | | SUBMIT |

🖊 **Tip:** You can submit any number of times you want. Your best submission is considered for computing total score.

Your Rating: ★★★★★

💬 View all comments

Resources

Tech Recruitment Blog

Product Guides

Developer hiring guide

Engineering Blog

Developers Blog

Developers Wiki

Competitive
Programming

Start a Programming
Club

Practice Machine
Learning

Solutions

Assess Developers

Conduct Remote
Interviews

Assess University Talent

Organize Hackathons

Company

About Us

Press

Careers

Service &
Support

Technical Support

Contact Us

+1-650-461-4192

contact@hackerearth.com

f 🐦 in

▶

?