Treasures in a map (1) X68356_en

Write a program that, given a map with treasures and obstacles, indicates if is possible or not to arrive to any treasure from a given initial position. The allowed movements are horizontal or vertical, but not diagonal. If it is necessary, passing over the treasures is allowed.

Input

Input starts with the number of rows n and the number of columns m of the map. n rows follow with m characters each one. A dot indicates an empty position, a `'X'` indicates an obstacle, and a `'t'` indicates a treasure. Finally, a pair of numbers r and c indicates the initial row and column (both of them starting with 1) where your program must start to look for the treasures. You can suppose that $n > 0$, that $m > 0$, that r will be between 1 and n, that c will be between 1 and m, and that the initial position will be always in an empty position.

Output

Your program must print `"1"` or `"0"` depending on if it possible or not to arrive to any treasure.

Observation

The simplest way to solve this exercise does not use any queue.

Sample input 1

```
7 6
..t...
..XXX.
......
tX..X.
.X..Xt
.XX...
..t...
5 3
```

Sample output 1

```
1
```

Sample input 2

```
4 10
..t...X...
.....X..t.
XXXXX.X...
.......X.t
4 1
```

Sample output 2

```
0
```

Sample input 3

```
5 7
.......
.XXXXXt
.X...Xt
.X.X.XX
...X.Xt
5 5
```

Sample output 3

```
1
```

Problem information

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