



02:53:58 HRS MIN SEC

Shopee Code League 2022 - Qualification Round

LIVE

INVITE ONLY ACCESS

Mar 19, 2022, 02:00 PM WIB - Mar 19, 2022, 05:00 PM WIB

INSTRUCTIONS PROBLEMS SUBMISSIONS LEADERBOARD ANALYTICS JUDGE

← Problems / Shopee Xpress Delivery

Shopee Xpress Delivery

Max. score: 100

00	0	1	2	3	4	5	6	7
0	go					1		
1		1					2	
2								
3				1				
4						2		2
5								
6			3					3
7				2				end

Description

Bob is a Shopee Xpress deliveryman and is delivering a package to his destination. He started his journey from one of our Shopee warehouses at position (0, 0), and his destination is at the bottom-right corner of the map. For example, if the map is an 8x8 grid, the destination is (7, 7).

Each step, his car can move 1 square up, down, left, or right. If his car reaches a black hole, it can teleport to any other location connected to the black hole at no cost, he also can skip the teleport feature. For example, if the car reaches black hole A at position (1, 1), Bob can teleport to position (0, 5) without costing an additional step.

Find the least number of steps (shortest path) that Bob can take to move from (0, 0) to the destination



So, one path of least steps for example map is:

 $0.0 \rightarrow 0.1 \rightarrow 1.1/0.5 \rightarrow 1.5 \rightarrow 1.6/7.3 \rightarrow 7.2 \rightarrow 6.2/6.7 \rightarrow 7.7$, the answer is 7.

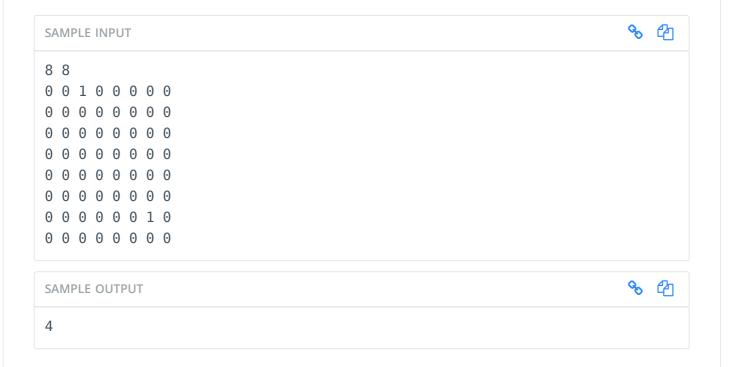
Input:

The first line contains two numbers M, N ($1 \le M, N \le 100$). M refers to the number of rows in the map, and N refers to the number of columns in the map.

The next M rows contain N values x_{ij} ($0 \le x[i][j] \le 255$), where 0 means that position (i, j) is an empty square, and non-zero values mean that a black hole is present in the square. Non-zero values are guaranteed to have at least 2 or more instances on the map.

Output:

To print the integer of the least number of steps needed.



Explanation

NA

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned when all the testcases pass.
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

	Cove	Languaga	21 ale
	Save	Language	✓ ½ ⁿ
			vscode
"Z Tiny Vou can submit any number of times you want Vo	ur bost sul	omission is considered for some	uting total score
Tip: You can submit any number of times you want. Yo	ur best sui	omission is considered for compl	uting total score.
Your Rating: Like 0 Share			
Your Rating: Like 0 Share			
View all comments			
Posaursos	Sol u+	ions CompanyS	

