



02 : 55 : 14
HRS MIN SEC

Shopee Code League 2022 - Qualification Round

LIVE INVITE ONLY ACCESS

Mar 19, 2022, 03:00 PM SGT - Mar 19, 2022, 06:00 PM SGT

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 8×8 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 ($1 \leq M, N \leq 100$). 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} ($0 \leq x_{ij} \leq 255$), 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.

SAMPLE INPUT



```
8 8
0 0 1 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0
0 0 0 0 0 0 0 0
```

SAMPLE OUTPUT



```
4
```

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

Save

C (gcc 10.3)



```
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
8      printf("Input number is %d.\n", num); // Writing output
9  }
10
11 // Warning: Printing unwanted or ill-formatted data to output
12 // will cause the test cases to fail
13
14 // Write your code here
15
```

1:1 vscode



Test against custom input ▼

Compile & Test code

Submit code

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

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