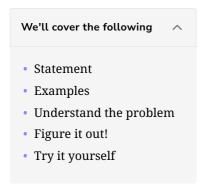


### **Number of Islands**

Try to solve the Number of Islands problem.



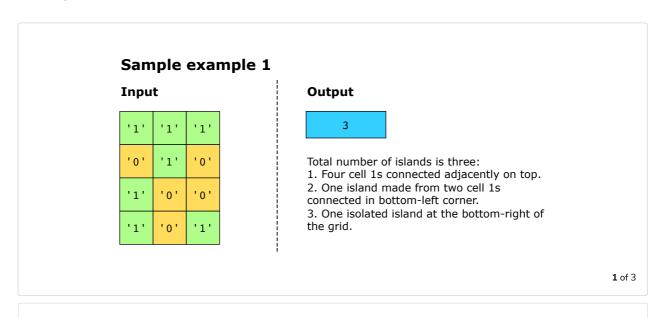
#### **Statement**

Let's consider a scenario with an  $(m \times n)$  2D grid containing binary numbers, where '0' represents water and '1' represents land. If any '1' cells are connected to each other horizontally or vertically (not diagonally), they form an island. Your task is to return the total number of islands in the grid.

#### **Constraints:**

- $1 \leq \operatorname{grid.length} \leq 300$
- $1 \leq \operatorname{grid[i].length} \leq 300$
- grid[i][j] is either '0' or '1'.

## **Examples**



Sample example 2			
Inpu	t		
'0'	'1'	'0'	
'1'	'0'	'1'	
	111	1.0.1	



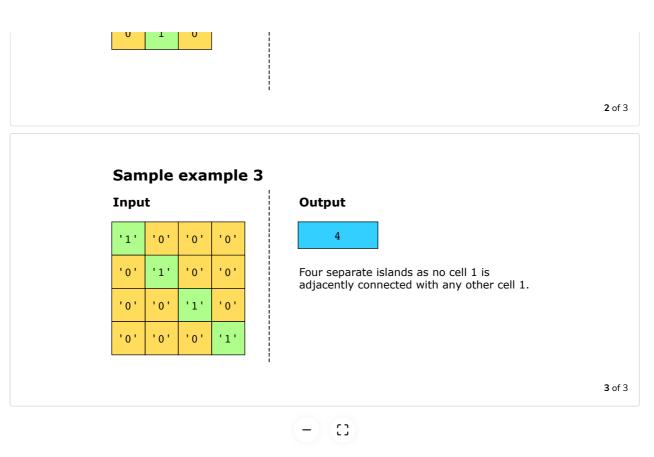


Four separate islands as no cell with value 1 is adjacently connected with any other cell 1.

?

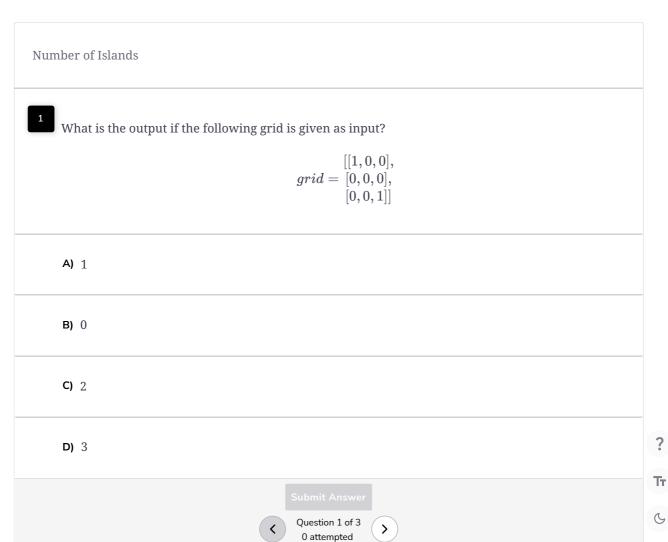
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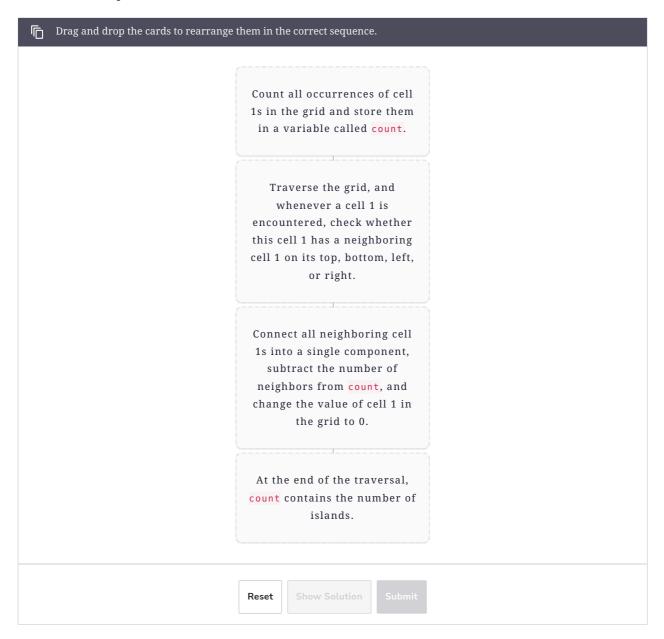
# Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:



# Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.



# Try it yourself

Implement your solution in NoOfIslands.java in the following coding playground. You will need the provided supporting code to implement your solution.

