Meta Hacker Cup
Round 2

2023

Validate Solution & Submit



Home

Scoreboard

Ends in 2h 58m 20s

Score: 0 / 100 points **Rank:** 1st out of 6,192

PROBLEMS

A1: Ready, Go (Part 1)	8 pt
A2: Ready, Go (Part 2)	9 pt
B: Meta Game	18 pt
C: Wiki Race	24 pt
D: Tower Rush	41 pt

FAQ

My Clarifications

Problem A1: Ready, Go (Part 1)

8 points

Problem

My Submissions

This problem shares some similarities with A2, with key differences in bold.

Atari 2600? More like Atari 2600 BCE!

The classic board game Go is a two-player game played on an $R \times C$ board. One player places white stones while the other places black stones. On a player's turn, they may place a stone in any empty space. A curiosity of Go is that stones are placed on the intersections of grid lines rather than between the lines, so an in-progress 5×5 game looks like this:



An orthogonally contiguous set of stones of the same color is called a *group*. A group of stones is captured (and removed from the board) once no stones in the group has an adjacent empty space.

You're playing as Black and it's your turn. Given a valid board (i.e. no groups have 0 adjacent empty spaces), is it possible to capture any white stones on this turn with a single black stone?

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Pranav

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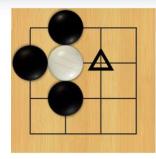
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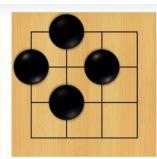
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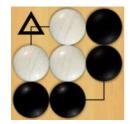
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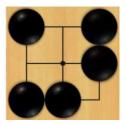
My Clarifications





Here, Black can capture a group of 3 white stones. Note that this move is valid even though the new black stone has no adjacent empty spaces at the moment it's placed:





Black can even capture multiple groups at once. Here, Black captures a group of 2 stones and a group of 3 stones:





The Go board is represented as a character array Awhere $A_{i,j}$ is one of:

- B for a black stone
- W for a white stone
- . for an empty space

Constraints

$$1 \le T \le 160$$
$$1 \le R, C \le 19$$

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Input begins with an integer T, the number of test cases. Each case begins with a line containing two integers R and C. Then, R lines follow, the ith of which contains C characters $A_{i,1}$ through $A_{i,C}$.

Output Format

For the ith test case, print "Case #i: " followed by "YES" if you can capture any white stones, or "NO" if you cannot.

Sample Explanation

The first sample case is the first capture example shown above. Black can capture the lone white stone.

In the second case, Black can capture a group of 5 white stones.

The third case is the same as the second case, except that the group of 5 white stones has two empty adjacent spaces, so it cannot be captured in one term. The other white stones can also not be captured on this turn.

In the fourth case, White could capture a black stone if it was their turn, but Black cannot capture any white stones.

The fifth case is the second capture example shown above. Black can capture 3 white stones by playing in the upper-left corner.

Sample Input

Case #1: YES Case #2: YES Case #3: NO Case #4: NO

Case #5: YES

5
4 4
.B..
BW..
.B..
4 5
WWWB.
WB...
WB.WB
B.W..
4 5

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W	
.WBWW	
.BW	
3 3	
.WB	
WWB	
BB.	

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