Portals
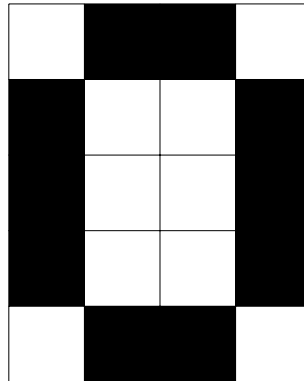## Introduction to Computer Science

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1 Problem

A Nether Portal is a portal to another dimension from a popular game Minecraft. A valid Nether Portal is a rectangular frame made out of obsidian blocks (excluding the corners) and filled with empty air blocks. It is at least 5 blocks high and 4 blocks wide.
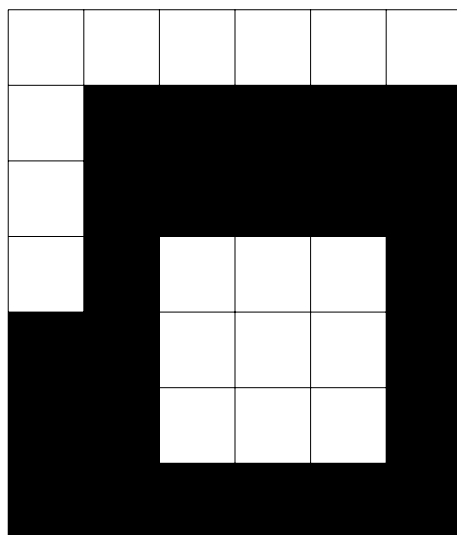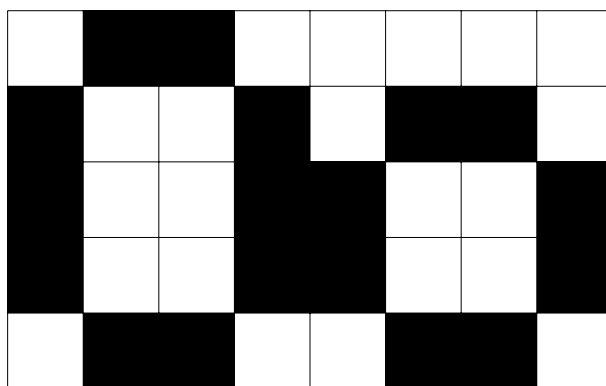

Smallest possible Nether Portal

Your job is, given a 2-dimensional array of characters (an array of strings) representing certain blocks ("O" for obsidian, and "A" for air), to check whether it contains a valid Nether Portal.
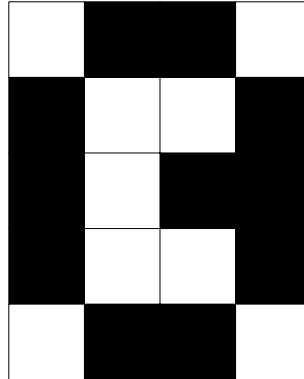
2 Examples
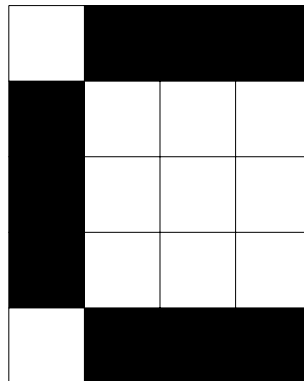
2.1 Valid:

Square with additional obsidian

One valid one invalid

2.2 Invalid:

Obsidian blocking the portal

Portal left unclosed

2.3 Example input:

[
"AOOOA" ,
"OAAAO" ,
"OAAAO" ,
"OAAAO" ,
"AOOOA"
]