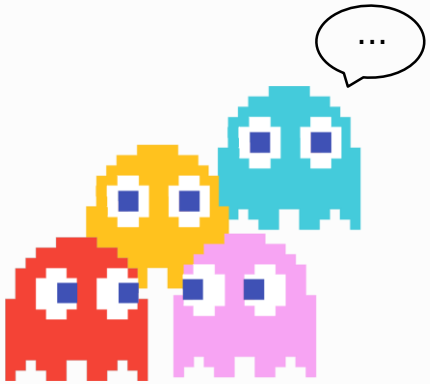
LEVEL 3



Ghosts: We want to play as well. We will catch Pacman.

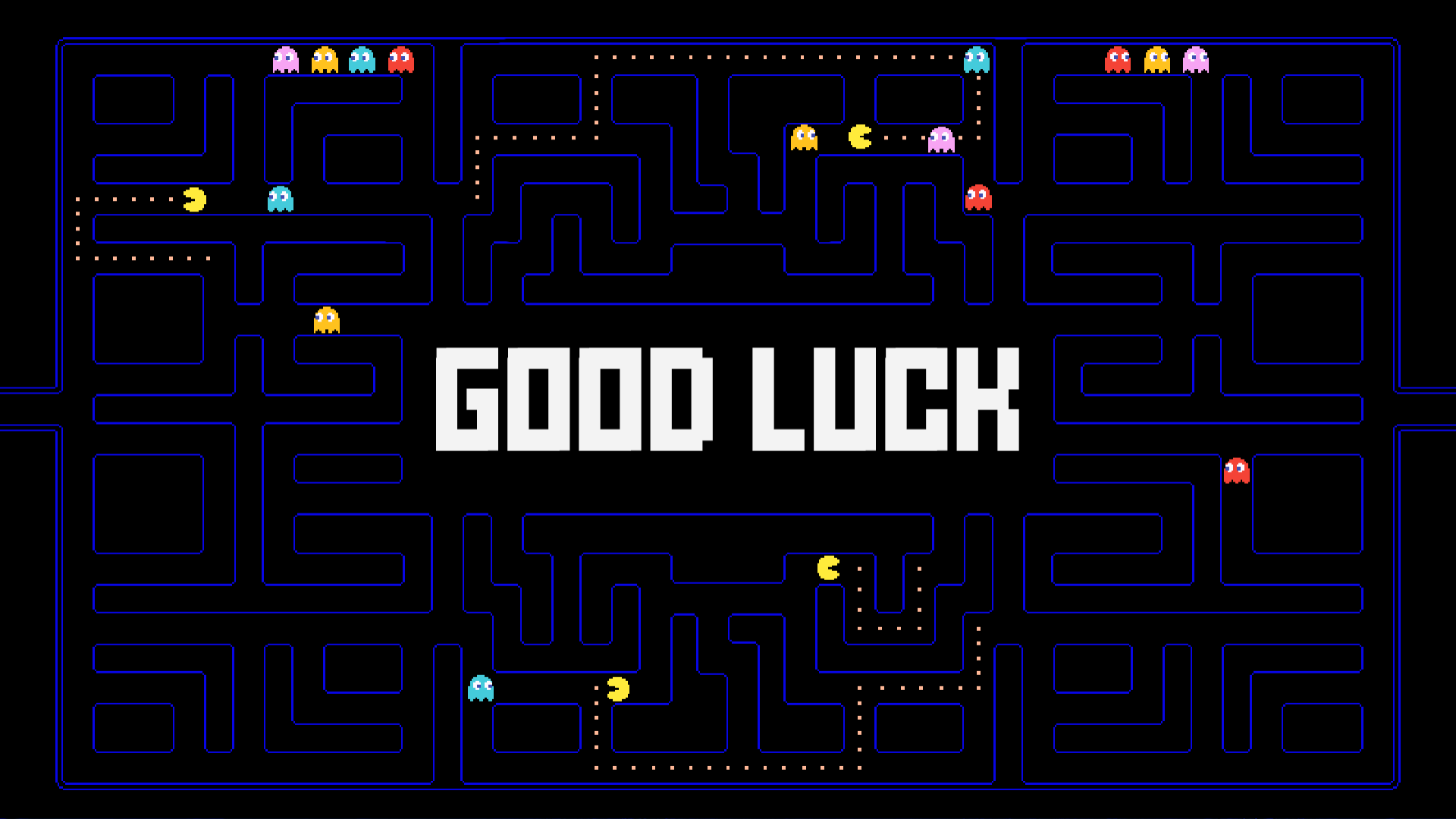
Your Task: Find out if Pacman was caught by the ghosts.

- You are given a game board that follows the same rules as in the previous levels.
- Now there are a few ghosts that roam the board. Ghosts are represented on the board with a ‘G’. For each ghost you are given a movement sequence just like for Pacman in the last level. Ghosts have the same speed as Pacman, so whenever he makes a step, they do as well. If at the **end of a step** Pacman is in the **same cell as a ghost,** he **dies**. If Pacman ever tries to do a step that would **move** him **into a wall,** he **dies** as well.
- **If Pacman meets a ghost in a cell that also contains a coin, Pacman will not collect this coin.**
- **Output the number of coins that Pacman collected and whether he survived. In the case that he died, output the number of coins that he collected until his death.**

Hint: Ghosts movement patterns could overlap and multiple ghosts could be at the same place at the same time. Ghosts movement sequence will not go through walls. Ghosts do not collect coins.

	Input	Output
Format	N boardMatrix pacmanRow pacmanColumn sequenceLength movement (repeated sequenceLength times) **numberOfGhosts** **ghostRow ghostColumn** **sequenceLength** **movement (repeated sequenceLength times)** **(the 3 above lines are repeated numberOfGhost times)**	**coinCount survivedStatus**
Types	N (int): the number of rows and columns of the board (range: 1 - 100) boardMatrix (StringList): N strings with the length of N pacmanRow (int): the row that Pacman is in (starting with 1) pacmanColumn (int): the column that Pacman is in (starting with 1) sequenceLength (int): the lenght of a movement sequence movement (char): a movement that an object will execute **numberOfGhosts (int): the number of ghosts** **ghostRow (int): the row that the ghost is in (starting with 1)** **ghostColumn (int): the column that the ghost is in (starting with 1)**	**coinCount (int): the number of coins that Pacman has collected(not counting coins he collected after his death)** **survivedStatus (boolean): if Pacman has survived 'YES' if Pacman died 'NO'**

	Input	Output
Example	7 WWWWWWWW WCCCCCW WCWCWCW WCWCWCW WCWGWCW WGCPCCW WWWWWWWW 6 4 5 UUDUU 2 6 2 5 UUDUD 5 4 5 UDUUU	2 YES Explanation: In step two Pacman moves up while the ghost that started on ‘5 4’ moves down, causing pacman and the ghost to switch places. Pacman does not die from this since Pacman and the ghost are on different cells at the end of the step.


GOOD LUCK