Mimic - Andrew Bressette

In Mimic you will attempt to be the first player to move one of your checkers to the last row on the opposite side of the board. Sounds easy, right? In Mimic, every move has two phases: the original move (where you move one of your pieces) and the mimicked move (where your opponent may have to copy your move). Pieces will stack, pieces will get stuck, pieces will get shoved off the board. All in a day's work as you attempt to outmaneuver your opponent in Mimic!

Orthogonally Visible

Before moving one of your pieces, you'll need to determine how many of your opponent's pieces are **orthogonally visible** from the piece you wish to move. We'll see why this matters a bit later. Imagine arrows extending North, South, East, and West from your piece and then stopping once they reach any other piece (yours or your opponent's) or they reach the edge of the board. If any of your opponent's pieces were hit by one of these arrows, we say it is **orthogonally visible** from your piece.

In figure 2, blue wants to move the piece on e4. Blue first determines how many opponent pieces are orthogonally visible to the piece on e4. Extending the arrows from e4, we see only the red piece on e7 is orthogonally visible. Notice the red piece on i4 is not, since it is blocked by the blue piece on h4.

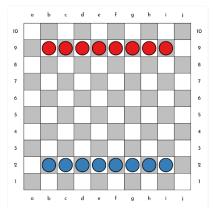


Figure 1: Starting Position

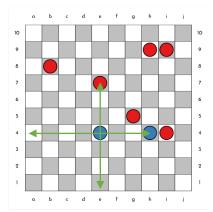


Figure 2: Orthogonally Visible

The Rules

Players will alternate turns. All pieces move like the king in chess, to any **vacant** adjacent square. If, prior to moving your piece, there was **exactly one** of your opponent's pieces orthogonally visible to the piece you are moving, then your opponent's piece will "mimic" your move. In figure 2, if blue moved e4-e5 (North for blue), then red would immediately move e7-e6 (North for red). If blue moved e4-f5 (NE for blue), then red would immediately mov e7-d6 (NE for red).

If the mimicked move results in a piece moving off any edge of the board, then that piece is removed from play. A player cannot move a piece off the edge of the board as their original move. While stacking is NOT permitted as an original move, stacking IS permitted by mimicking pieces. The piece that is mimicking will be placed on top of any piece or stack in the destination square. There is no limit to stack height. Only pieces on top of stacks can be moved (via original move or mimicked move). Stacks are never moved. It is possible that the piece which moved first could be stacked upon if it moved directly toward and adjacent to an orthogonally visible piece. Players are not allowed to immediately repeat the game position.

If there are no opponent's pieces orthogonally visible to the piece you are moving, then ignore the mimicking phase. If there are 2 or more opponent's pieces orthogonally visible to one of your pieces, then your piece is frozen and cannot be moved by an original move (though it can still be moved if it must mimic a move).

If on a player's turn, they have no legal moves, they lose the game. If an original move reaches the goal row, the game ends and that player is the winner, all mimicked moves are ignored.