

Konane

Pieces and Board: Konane is played on a rectangular n rows by m columns board. The pieces alternate Black and White, so two pieces of the same color are never adjacent. Your implementation must handle an arbitrary number of rows and spaces. The default game has 3 rows by 4 columns with the configuration of Figure 1.

To Move: The game begins with a board with at least two pieces removed (a black and a white piece). On one's turn, a player uses his/her piece to vertically or horizontally jump over an opponent's piece. Any piece that is jumped is then removed from the board. After a player has just made a move, if the player has more valid moves with the *same* piece, the player may choose to continue and go again (but doesn't have to -- called "passing up a go-again").

To Win: The player who has no moves remaining loses.

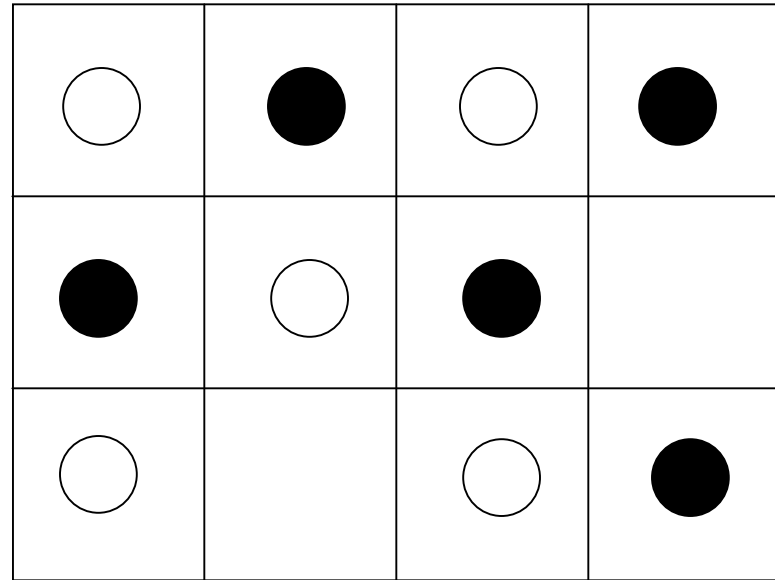
Compulsory Rule Changes:

- Misère Rules: The player who has no moves remaining *wins*.
- On a player's go-again turn the player may choose to move a different piece. (I.e., if a player captures a piece on her turn, she may continue to capture pieces if she wishes until there are no pieces left to capture).

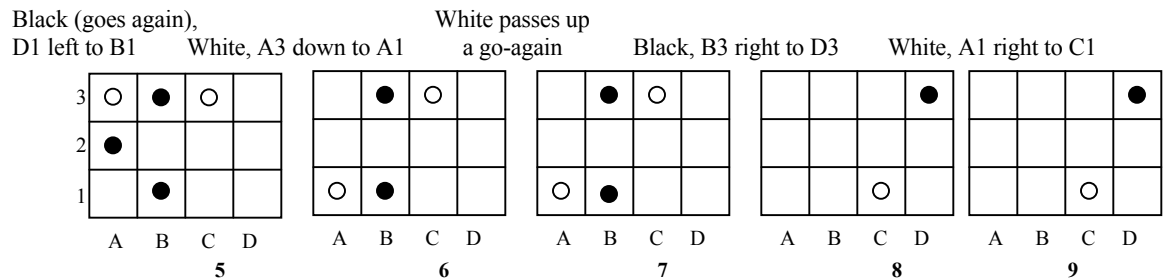
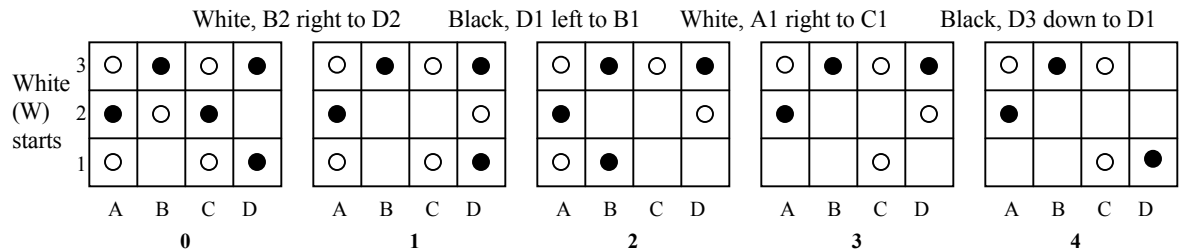
Position Representation:

• (T L row row row ...)
 T stores whose turn it is (w or b). L stores the cell where the player T last moved to (used in go-again turns). If the previous move was made by the opponent, L should be empty: "". Each row is in the form $ppp...$ where p is "w" or "b", representing the corresponding piece on the board, or "-" if blank. The number of row's in the position indicates the number of rows. In each row, the number of p 's indicates the number of columns.

Figure 1



Example game:



Representation for initial position: (w "" wbwb bwb- w-wb)
 board #4: (b d1 wbw- b--- --wb)

Black has no moves left.
 White wins.