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# Kalah

## OVERVIEW

Kalah is a modern version of the ancient game Mancala. Kalah is a 2 player board game where each player has seeds or counters. The board has 6 small pits, called houses, on each side; and a big pit, called a store, at each end. The object of the game is to capture more seeds than one's opponent.



## Standard Rules

1. At the beginning of the game, four seeds are placed in each house.
2. Each player controls the six houses and the seeds on their side of the board. The player's score is the number of seeds in the store to their right.
3. Players take turns sowing their seeds. On a turn, the player removes all seeds from one of the houses under their control. Moving counter-clockwise, the player drops one seed in each house in turn, including the player's own store but not their opponent's.
4. If the last sown seed lands in an empty house owned by the player, and the opposite house contains seeds, both the last seed and the opposite seeds are captured and placed in the player's store.
5. If the last sown seed lands in the player's store, the player gets an additional move. There is no limit on the number of moves a player can make in their turn.
6. When one player no longer has any seeds in any of their houses, the game ends. The other player moves all remaining seeds to their store, and the player with the most seeds in their store wins.

It is possible for a game to end in a draw.

## SPECIFICATIONS

You are tasked with programming the game of Kalah using a console program or a GUI. You do not need to program an AI player. The user should be able to move for both players. You may use any programming language you wish. Provide a README that describes your implementation, how to build your program, how to run your program, and how to play the game. Submit your README along with all of your source code to the provided GitHub repository.

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## Bonus

Implement as many of the following variations of Kalah as you are able to. If you are writing a console application, these variations should be enabled using command-line arguments.

- The game may start with a different number of seeds and houses than four and six, respectively. This is commonly referred to as Kalah(h,s), where h designates the number of houses on each side, and s designates the number of seeds that start out in each house.
- Players may sow their seeds in a clockwise direction, requiring more seeds to be sowed in a single turn to reach the store.
- The "Empty Capture" variant: If the last sown seed lands in an empty house owned by the player, even if the opposite house is empty, the last seed is captured and placed into the player's store.
- The "Seed On" variant: there are no captures when ending in an empty house. When the last seed ends in a non-empty house on either side of the board, that seed and all seeds from that house are sown. The turn only ends when the last seed falls in an empty house.