

Help For the Game Of ZigZag

Introduction

Welcome to the network ZigZag server. The challenge command is described here, and move syntax is descirbe below. [Other commands](#) are the same for all pbmserv games.

```
zigzag challenge [-pits=number] [-seeds=number] userid1 userid2
```

Starts a new game between **userid1** and **userid2**.

The -pits parameter sets the overall board size. This must be an even number in the range 2..26 (default 6).
The -seeds parameter specifies the number of seeds to start with in each hole, which should be an odd number (default 5).

Move Syntax:

```
zigzag move <board#> <userid> <password> c
```

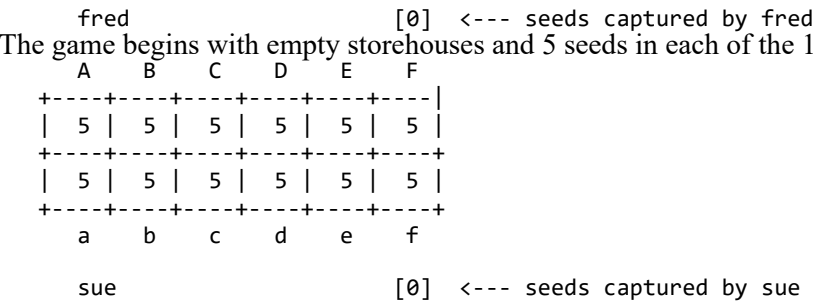
will make a move for the current player from pit 'c'. May be uppercase or lowercase - the server will work out which pit you mean.

Overview

Zig Zag is a semi-multi-lap mancala game for 2 players, by Clark D. Rodeffer & Amanda J. L. Rodeffer.

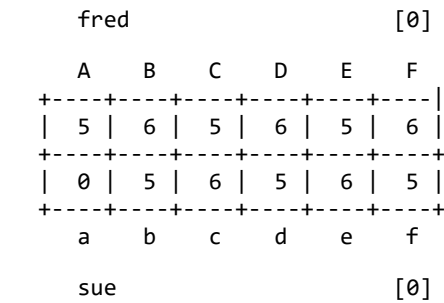
Rules

The game begins with empty storehouses and 5 seeds in each of the 12 pits.



Each player, on their turn, lifts all of the seeds from one of the non-empty pits on their own side of the board, and sows them, one at a time, in a zig zag fashion, with the start of the first lift (called a "lap") sowing toward the center line of the board. When the end of the board is reached, continue sowing straight across, then zig zag back in the other direction.

For example, if sue sows the 5 seeds in a (zig zag, beginning toward the center line) the board would look like this:



What happens next depends upon where the last seed lands.

- 1) If the last seed of the current lap falls into a non-empty pit on the opponent's side of the board (as in the example above), or into an empty pit on the mover's own side of the board, the turn is over, and the opponent's turn begins.
- 2) If the last seed of the current lap falls into a non-empty pit on the player's own side of the board, then the move continues and the mover lifts all of the seeds from that pit, including the last one sown, and sows them, one at a time, in a zig zag fashion, continuing in the same direction the last lap was going when it ended. Unlike the first lap, this may not necessarily be toward the center line of the board.

For example, in the above diagram, if fred lifts the 6 seeds from pit D, he would sow (zig zag, beginning toward the center line) into c-B-a-A-b-C. Then since the last seed fell into a non-empty pit on his own side of the board, he would lift the 6 seeds from pit 'c' and continue sowing d-E-f-F-e-D. The board would then look like this:

fred						[0]
A	B	C	D	E	F	
6	7	0	1	6	7	
1	6	7	6	7	6	
a	b	c	d	e	f	
sue						[0]

3) If the last seed of the current lap falls into an empty pit on the opponent's side of the board, the mover captures all of the seeds (if any) from the pit on their own side of the board directly across from the pit into which the last seed was sown, and places them into their storehouse. The turn is then over, and the opponent's turn begins.

For example, in the above diagram, if sue lifts the 7 seeds from pit e, she would sow (zig zag, beginning toward the center line) into pits D-c-B-a-A-b-C. Since the final seed fell into an empty pit on her opponent's side of the board, she gets to capture the eight seeds from pit c and place them into her storehouse. The board would then look like this:

fred						[0]
A	B	C	D	E	F	
7	8	1	2	6	7	
2	7	0	6	0	6	
a	b	c	d	e	f	
sue						[8]

Restriction: If your opponent sowed a non-capturing single seed into an empty hole on your own side of the board across the center line, you are not allowed to sow the same seed back where it came from unless it will capture seeds. This is to prevent endless cycles before the end of play, but (to mix metaphors) such a maneuver might be used tactically as a ko threat to force an opponent into zugzwang.

Aim: The game ends when no more seeds can be captured. Due to the forced first lap sowing toward the center line, this usually happens when there are two or fewer seeds remaining on the board. The player who last made a capturing move is awarded these remaining seeds.

The player who captures the most seeds wins.

Due to the nature of the zig-zag moves, the current player is guaranteed to have at least one valid move on their side of the board unless there are two or fewer seeds remaining.

History

This is Zig Zag version 1.0.0 by Clark D. Rodeffer & Amanda J. L. Rodeffer, January 31, 2007.

Implementation by Cameron Browne. Help file by Cameron Browne and Clark D. Rodeffer.