

A multiplayer game called Token Pass has the following rules.

Each player begins with a random number of tokens (at least 1, but no more than 10) that are placed on a linear game board. There is one position on the game board for each player. After the game board has been filled, a player is randomly chosen to begin the game. Each position on the board is numbered, starting with 0.

The following rules apply for a player’s turn.

- The tokens are collected and removed from the game board at that player's position.
- The collected tokens are distributed one at a time, to each player, beginning with the next player in order of increasing position.
- If there are still tokens to distribute after the player at the highest position gets a token, the next token will be distributed to the player at position 0.
- The distribution of tokens continues until there are no more tokens to distribute.

The Token Pass game board is represented by an array of integers. The indexes of the array represent the player positions on the game board, and the corresponding values in the array represent the number of tokens that each player has. The following example illustrates one player's turn.

Example

The following represents a game with 4 players. The player at position 2 was chosen to go first.

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Player	0	1	2	3
Tokens	3	2	6	10

The tokens at position 2 are collected and distributed as follows.

- 1st token - to position 3 (The highest position is reached, so the next token goes to position 0.)
- 2nd token - to position 0
- 3rd token - to position 1
- 4th token - to position 2
- 5th token - to position 3 (The highest position is reached, so the next token goes to position 0.)
- 6th token - to position 0

After player 2’s turn, the values in the array will be as follows.

			↓	
Player	0	1	2	3
Tokens	5	3	1	12