

## Othello.java

## Othello.txt

Othello, also known as Reversi, is a game based on the older ancient game of Go, but significantly simplified. You will be writing an Othello simulation. You will be given the state of the game board which is an eight by eight 2D Character array. Each element of the array will hold the character 'E' (empty), 'B' (black), or 'W' (white). The black and white players take turns placing one of their piece on the board. We are not going to worry about how the pieces are placed, instead we will consider the result of placing the piece on the board.

From the position of where the chip is placed on the board, the player looks in the eight cardinal directions: north, northeast, east, southeast, south, southwest, west, and northwest. On each of these lines, starting at the piece placement, if there is another piece of the same color (let's call it the ending piece) then all the opponents pieces between the starting piece and the ending piece become the same color as the starting piece. Each of the cardinal directions get a chance at changing these pieces, always starting from the starting piece.

You will be given a textfile called Othello.txt. In that file, you will be given the status of the board first. It will always be an eight by eight board. You will print out the initial state of the board. You will then receive an unknown number of coordinates and colors, this is each move and the color piece being laid down. Each move should produce an output. Once every move is completed, you should count the number of white pieces and the number of black pieces and print out who won.

### Sample text file

```
EEEEEEEE
EEEEEEEE
EEEEEEEE
EEEBWEEE
EEEWBEEE
EEEEEEEE
EEEEEEEE
EEEEEEEE
5 4 W
3 2 B
2 4 W
3 5 B
6 4 W
6 5 B
7 4 W
```

### Sample output

```
EEEEEEEE
EEEEEEEE
EEEEEEEE
EEEBWEEE
EEEWBEEE
EEEEEEEE
EEEEEEEE
EEEEEEEE
Move 5,4:W
EEEEEEEE
```

EEEEEEEEE  
EEEEEEEEE  
EEEBWEEE  
EEEWWEEE  
EEEEWEEE  
EEEEEEEEE  
EEEEEEEEE  
Move 3,2:B  
EEEEEEEEE  
EEEEEEEEE  
EEEEEEEEE  
EEBBWEEE  
EEEWWEEE  
EEEEWEEE  
EEEEEEEEE  
EEEEEEEEE  
Move 2,4:W  
EEEEEEEEE  
EEEEEEEEE  
EEEEWEEE  
EEBBWEEE  
EEEWWEEE  
EEEEWEEE  
EEEEEEEEE  
EEEEEEEEE  
Move 3,5:B  
EEEEEEEEE  
EEEEEEEEE  
EEEEWEEE  
EEBBBBBEE  
EEEWWEEE  
EEEEWEEE  
EEEEEEEEE  
EEEEEEEEE  
Move 6,4:W  
EEEEEEEEE  
EEEEEEEEE  
EEEEWEEE  
EEBBBBBEE  
EEEWWEEE  
EEEEWEEE  
EEEEWEEE  
EEEEEEEEE  
Move 6,5:B  
EEEEEEEEE  
EEEEEEEEE  
EEEEWEEE  
EEBBBBBEE  
EEEBWEEE  
EEEEBEEE  
EEEEWBEE  
EEEEEEEEE  
Move 7,4:W  
EEEEEEEEE  
EEEEEEEEE  
EEEEWEEE  
EEBBBBBEE

EEEBWEEE

EEEEBEEE

EEEEWBEE

EEEEWEEE

BLACK WINS 7 to 4