

src\Array2DAssignment.java

```
1 public class Array2DAssignment {
2     public static void main(String[] args) {
3         String[][] og = createArray(10, 10);
4
5         char[][] board = {{'O', 'O' , 'O'},
6                           {' ', 'X' , 'X'},
7                           {'X', ' ', 'O'}};
8
9         System.out.println(isWinner(board));
10    }
11    public static String[][] createArray(int row, int col){
12
13        String[][] arr2d = new String[row][col];
14        for (int r = 0; r < arr2d.length; r++) {
15            for (int c = 0; c < arr2d[r].length; c++) {
16                arr2d[r][c] = "Row" + r + "Column" + c;
17            }
18        }
19        return arr2d;
20    }
21    public static void arrayPortion(String[][] startingArray, int startR, int endR, int
startC, int endC){
22
23        String[][] newArr = new String[endR - startR][endC - startC];
24        for (int r = startR; r < endR; r++) {
25            for (int c = startC; c < startingArray[endC].length; c++) {
26                startingArray[r][c] = newArr[r + startR][c + startC];
27                System.out.println(newArr);
28            }
29        }
30        System.out.println();
31    //public static int sum(String[][] arr2d){
32        // String sum = 0;
33        // for (int r = 0; r < arr2d.length; r++) {
34            // sum += arr2d[r][columnI];
35            // }
36            // return sum;
37            //visits every row in a specified column
38    }
39    public static void ticTacToe(){
40        char[][] board = {{'O', 'O' , 'O'},
41                          {' ', 'X' , 'X'},
42                          {'X', ' ', 'O'}};
43    }
44    public static boolean isValid(char[][] arr){
45        for (int r = 0; r < arr.length; r++) {
46            if (r != 'X' || r != 'O'){
47                return false;
48            }
49            for (int c = 0; c < arr[r].length; c++) {
50                if (c != 'X' || c != 'O'){
51                    return false;
52                }
53            }
54        }
55    }
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53     }
54 }
55     return true;
56 }
57 public static char isWinner(char[][] arr){
58     for (int r = 0; r < arr.length; r++) {
59         if ('X' == arr[r][0]){
60             return 'X';
61         } if('O' == arr[r][0]){
62             return 'O';
63         }
64     }
65     for (int c = 0; c < arr[0].length; c++){
66         if ('X' == arr[0][c]){
67             return 'X';
68         }
69         if('O' == arr[0][c]){
70             return 'O';
71         }
72     }
73     if ('X' == arr[0][0] && 'X' == arr[1][1] && 'X' == arr[2][2]){
74         return 'X';
75     }
76     if ('O' == arr[0][0] && 'O' == arr[1][1] && 'O' == arr[2][2]){
77         return 'O';
78     }
79     if ('X' == arr[0][2] && 'X' == arr[1][1] && 'X' == arr[2][0]){
80         return 'X';
81     }
82     if ('O' == arr[0][2] && 'O' == arr[1][1] && 'O' == arr[2][0]){
83         return 'O';
84     }
85     return ' ';
86 }
87 }
88 }
```