boolean checkHorizontalWin(BoardPosition pos, char p)

<table>
<tr>
<td>Input
State: (number to win = 4)
<table>
<tr><td></td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>0</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td>x</td><td>x</td><td>x</td><td>x</td><td></td></tr>
<tr><td>3</td><td>o</td><td>o</td><td>o</td><td>x</td><td>o</td></tr>
<tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Pos.getRow = 2
Pos.getCol = 2
P = x</td>
<td>Output
checkHorizWin = true

state of the board is unchanged</td>
<td>Reason:
This test case is unique and distinct because the last x was placed in the middle of the string of 4 consecutive x’s as opposed to on the end, so the function needs to count x’s on the right and left

Function name:
test_CheckHorizWin_win_last_marker_middle</td>
</tr>
</table>

Notes: Remember to include the state of the board as input and all the parameters to the method. The state of the board is not included in the output at it is enough to say that it has unchanged. However it is important to verify that the state of the board is unchanged by checkHorizontalWin.

void placeMarker(BoardPosition pos, char p)

<table>
<tr>
<td>Input:
State:
<table>
<tr><td></td><td>0</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td>x</td><td></td><td></td></tr>
<tr><td>3</td><td>o</td><td></td><td></td><td></td></tr>
</table>

P = a
Pos.getRow = 1
Pos.getCol = 2</td>
<td>Output:
State:
<table>
<tr><td></td><td>0</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>0</td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td></td><td></td><td>a</td><td></td></tr>
<tr><td>2</td><td></td><td>x</td><td></td><td></td></tr>
<tr><td>3</td><td>o</td><td></td><td></td><td></td></tr>
</table>
</td>
<td>Reason:
This test case is unique because I am placing a marker representing a player who has not been placed on this board before

Function name:
testPlaceToken_col_not_empty</td>
</tr>
</table>

Note: In this case I do need to include the state of the board in my output as the method changes the state of the board