

CheckerBoard(void) – [test_CheckerBoard_Constructor]

Input: N/A

State: N/A

Output: N/A

State:

pieceCount:

x: 12

o: 12

viableDirections:

x: [SE, SW]

o: [NE, NW]

board:

x	*	x	*	x	*	x	*
*	x	*	x	*	x	*	x
x	*	x	*	x	*	x	*
*		*		*		*	
	*		*		*		*
*	o	*	o	*	o	*	o
o	*	o	*	o	*	o	*
*	o	*	o	*	o	*	o

whatsAtPos(BoardPosition pos) – [test_whatsAtPos_MinRowMinCol]

<p>Input: (0,0)</p> <p>State:</p> <p>pieceCount: x: 12 o: 12</p> <p>viableDirections: x: [SE, SW] o: [NE, NW]</p>	<p>Output: x</p> <p>State:</p> <p>State of the object is unchanged</p>
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board:

x	*	x	*	x	*	x	*
*	x	*	x	*	x	*	x
x	*	x	*	x	*	x	*
*		*		*		*	
	*		*		*		*
*	o	*	o	*	o	*	o
o	*	o	*	o	*	o	*
*	o	*	o	*	o	*	o

whatsAtPos(BoardPosition pos) – [test_whatsAtPos_MaxRowMaxCol]

Input: (7, 7)

State:

pieceCount:

x: 12

o: 12

viableDirections:

x: [SE, SW]

o: [NE, NW]

board:

x	*	x	*	x	*	x	*
*	x	*	x	*	x	*	x
x	*	x	*	x	*	x	*
*		*		*		*	
	*		*		*		*

Output: o

State:

State of the object is unchanged

*	o	*	o	*	o	*	o
o	*	o	*	o	*	o	*
*	o	*	o	*	o	*	o

whatsAtPos(BoardPosition pos) – [test_whatsAtPos_MidRowMidCol]

Input: (2, 4)

State:

pieceCount:

x: 12

o: 12

viableDirections:

x: [SE, SW]

o: [NE, NW]

board:

x	*	x	*	x	*	x	*
*	x	*	x	*	x	*	x
x	*	x	*	x	*	x	*
*		*		*		*	
	*		*		*		*
*	o	*	o	*	o	*	o
o	*	o	*	o	*	o	*
*	o	*	o	*	o	*	o

Output: x

State:

State of the object is unchanged

whatsAtPos(BoardPosition pos) – [test_whatsAtPos_BlackTile]

<p>Input: (0, 1)</p> <p>State:</p> <p>pieceCount:</p> <p>x: 12</p> <p>o: 12</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>board:</p> <table><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td></tr><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr><tr><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr></table>	x	*	x	*	x	*	x	*	*	x	*	x	*	x	*	x	x	*	x	*	x	*	x	*	*		*		*		*			*		*		*		*	*	o	*	o	*	o	*	o	o	*	o	*	o	*	o	*	*	o	*	o	*	o	*	o	<p>Output: *</p> <p>State:</p> <p>State of the object is unchanged</p>
x	*	x	*	x	*	x	*																																																										
*	x	*	x	*	x	*	x																																																										
x	*	x	*	x	*	x	*																																																										
*		*		*		*																																																											
	*		*		*		*																																																										
*	o	*	o	*	o	*	o																																																										
o	*	o	*	o	*	o	*																																																										
*	o	*	o	*	o	*	o																																																										

whatsAtPos(BoardPosition pos) – [test_whatsAtPos_EmptyTile]

Input: (4, 0)

State:

pieceCount:

x: 12

o: 12

viableDirections:

x: [SE, SW]

o: [NE, NW]

board:

x	*	x	*	x	*	x	*
*	x	*	x	*	x	*	x
x	*	x	*	x	*	x	*
*		*		*		*	
	*		*		*		*
*	o	*	o	*	o	*	o
o	*	o	*	o	*	o	*
*	o	*	o	*	o	*	o

Output: “ ”

(empty space)

State:

State of the object is unchanged

placePiece(BoardPosition pos, char player) – [test_placePiece_EmptyTile_playerX]

<p>Input: pos = (3, 3) player = "x"</p> <p>State:</p> <p>pieceCount: x = 12 o = 12</p> <p>viableDirections: x = [SE, SW] o = [NE, NW]</p>	<p>Output: N/A</p> <p>State:</p> <p>pieceCount: x = 13 o = 12</p> <p>viableDirections: x = [SE, SW] o = [NE, NW]</p>
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X	*	X	*	X	*	X	*
*	X	*	X	*	X	*	X
X	*	X	*	X	*	X	*
*		*		*		*	
	*		*		*		*
*	O	*	O	*	O	*	O
O	*	O	*	O	*	O	*
*	O	*	O	*	O	*	O

X	*	X	*	X	*	X	*
*	X	*	X	*	X	*	X
X	*	X	*	X	*	X	*
*		*		*		*	
	*		*		*		*
*	O	*	O	*	O	*	O
O	*	O	*	O	*	O	*
*	O	*	O	*	O	*	O

getPieceCounts(void) – [test_getPieceCounts_x12_o12]

Input: N/A

State:

pieceCount:

x: 12

o: 12

viableDirections:

x: [SE, SW]

o: [NE, NW]

board:

X	*	X	*	X	*	X	*
*	X	*	X	*	X	*	X
X	*	X	*	X	*	X	*
*		*		*		*	
	*		*		*		*
*	O	*	O	*	O	*	O
O	*	O	*	O	*	O	*

Output:

x: 12

o: 12

State:

State of the object is unchanged

*	o	*	o	*	o	*	o	
---	---	---	---	---	---	---	---	--

getViableDirections(void) – [test_getViableDirections_8x8board]

<p>Input: N/A</p> <p>State:</p> <p>pieceCount:</p> <p>x = 12</p> <p>o = 12</p> <p>viableDirections:</p> <p>x = [SE, SW]</p> <p>o = [NE, NW]</p> <table><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td></tr><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr><tr><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr></table>	x	*	x	*	x	*	x	*	*	x	*	x	*	x	*	x	x	*	x	*	x	*	x	*	*		*		*		*			*		*		*		*	*	o	*	o	*	o	*	o	o	*	o	*	o	*	o	*	*	o	*	o	*	o	*	o	<p>Output:</p> <p>HashMap<Character, ArrayList<DirectionEnum>></p> <p>ViableDirections: x = [SE, SW], o = [NE, NW]</p> <p>State:</p> <p>State of the pieceCount is unchanged</p> <p>State of the board in unchanged</p> <p>State of the HashMap is unchanged</p>
x	*	x	*	x	*	x	*																																																										
*	x	*	x	*	x	*	x																																																										
x	*	x	*	x	*	x	*																																																										
*		*		*		*																																																											
	*		*		*		*																																																										
*	o	*	o	*	o	*	o																																																										
o	*	o	*	o	*	o	*																																																										
*	o	*	o	*	o	*	o																																																										

checkPlayerWin(Character player) – [test_checkPlayerWin_no_opponent_pieces_left]

<p>Input: x</p> <p>State:</p> <p>pieceCount:</p> <p>x: 12</p> <p>o: 0</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>board:</p> <table><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td></tr><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr></table>	x	*	x	*	x	*	x	*	*	x	*	x	*	x	*	x	x	*	x	*	x	*	x	*	*		*		*		*			*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*		<p>Output: True</p> <p>State: State of the object is unchanged</p>
x	*	x	*	x	*	x	*																																																										
*	x	*	x	*	x	*	x																																																										
x	*	x	*	x	*	x	*																																																										
*		*		*		*																																																											
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*		*		*		*																																																											
	*		*		*		*																																																										
*		*		*		*																																																											

checkPlayerWin(Character player) – [test_checkPlayerWin_opponent_pieces_exist]

<p>Input: x</p> <p>State:</p> <p>pieceCount: x: 12 o: 12</p> <p>viableDirections: x: [SE, SW] o: [NE, NW]</p> <p>board:</p>	<p>Output: False</p> <p>State: State of the object is unchanged</p>
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crownPiece(BoardPosition posOfPlayer) – [test_crownPiece_playerx_on_player_side]

<p>Input: (0,0)</p> <p>State:</p> <p>pieceCount:</p> <p>x: 12</p> <p>o: 12</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>board:</p> <table><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td></tr><tr><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td><td>x</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr><tr><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td></tr><tr><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td><td>*</td><td>o</td></tr></table>	x	*	x	*	x	*	x	*	*	x	*	x	*	x	*	x	x	*	x	*	x	*	x	*	*		*		*		*			*		*		*		*	*	o	*	o	*	o	*	o	o	*	o	*	o	*	o	*	*	o	*	o	*	o	*	o	<p>Output: N/A</p> <p>State:</p> <p>State of the object is unchanged</p>
x	*	x	*	x	*	x	*																																																										
*	x	*	x	*	x	*	x																																																										
x	*	x	*	x	*	x	*																																																										
*		*		*		*																																																											
	*		*		*		*																																																										
*	o	*	o	*	o	*	o																																																										
o	*	o	*	o	*	o	*																																																										
*	o	*	o	*	o	*	o																																																										

crownPiece(BoardPosition posOfPlayer) – [test_crownPiece_playerx_already_crowned]

<p>Input: (4,0)</p> <p>State:</p> <p>pieceCount:</p> <p>x: 12</p> <p>o: 12</p> <p>viableDirections:</p> <p>x: [SE, SW, NE, NW]</p> <p>o: [NE, NW]</p> <p>board:</p>	<p>Output: N/A</p> <p>State: State of the object is unchanged</p>
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<p>Input: ((2,0), SW)</p> <p>State:</p> <p>pieceCount:</p> <p>x: 12</p> <p>o: 12</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>board:</p> <table><tr><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td></tr><tr><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td></tr><tr><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td><td>X</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td></tr><tr><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td></tr><tr><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td><td>*</td><td>O</td></tr></table>	X	*	X	*	X	*	X	*	*	X	*	X	*	X	*	X	X	*	X	*	X	*	X	*	*		*		*		*			*		*		*		*	*	O	*	O	*	O	*	O	O	*	O	*	O	*	O	*	*	O	*	O	*	O	*	O	<p>Output: N/A</p> <p>State:</p> <p>State of the object is unchanged</p>
X	*	X	*	X	*	X	*																																																										
*	X	*	X	*	X	*	X																																																										
X	*	X	*	X	*	X	*																																																										
*		*		*		*																																																											
	*		*		*		*																																																										
*	O	*	O	*	O	*	O																																																										
O	*	O	*	O	*	O	*																																																										
*	O	*	O	*	O	*	O																																																										

jumpPiece(BoardPosition startingPos, DirectionEnum dir) – [test_jumpPiece_SEjump]

<p>Input: startingPos = new BoardPosition(4,4) dir = DirectionEnum.SE</p> <p>State: viableDirections: x: [SE, SW] o: [NE, NW]</p> <p>x is at (5,5) o is at (6,4)</p> <p>pieceCount x: 1 o: 1</p>	<p>Output: x jumps over to (2,6) o is removed True</p> <p>State: viableDirections: x: [SE, SW] o: [NE, NW]</p> <p>pieceCount x: 1 o: 0</p>
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board:							
	*		*		*		*
*		*		*		*	
	*		*		*		*
*		*		*	O	*	
	*		*	X	*		*
*		*		*		*	
	*		*		*		*
*		*		*		*	

board:							
	*		*		*		*
*		*		*		*	
	*		*		*	X	*
*		*		*		*	
	*		*		*		*
*		*		*		*	
	*		*		*		*
*		*		*		*	

jumpPiece(BoardPosition startingPos, DirectionEnum dir) – [test_jumpPiece_SWjump]

<p>Input:</p> <p>startingPos = new BoardPosition(2,2)</p> <p>dir = DirectionEnum.SW</p> <p>State:</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>pieceCount</p> <p>x: 1</p> <p>o: 1</p> <p>x is at (2,2)</p> <p>o is at (3,1)</p> <p>board:</p> <table> <tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr> <tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr> <tr><td></td><td>*</td><td>X</td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr> <tr><td>*</td><td>O</td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr> </table>					*		*		*		*	*		*		*		*			*	X	*		*		*	*	O	*		*		*		<p>Output:</p> <p>x jumps over to (4,0)</p> <p>o is removed</p> <p>True</p> <p>State:</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>pieceCount</p> <p>x: 1</p> <p>o: 0</p> <p>board:</p> <table> <tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr> <tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr> <tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr> <tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr> <tr><td>X</td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr> </table>					*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*		X	*		*		*		*
	*		*		*		*																																																																								
*		*		*		*																																																																									
	*	X	*		*		*																																																																								
*	O	*		*		*																																																																									
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X	*		*		*		*																																																																								

	*		*		*		*
*		*		*		*	
	*		*		*		*
*		*		*		*	

*		*		*		*	
	*		*		*		*
*		*		*		*	

jumpPiece(BoardPosition startingPos, DirectionEnum dir) –
[test_jumpPiece_invalidMove_noPieceToJump]

<p>Input:</p> <p>startingPos = new BoardPosition(3,3)</p> <p>dir = DirectionEnum.SE</p> <p>State:</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>pieceCount</p> <p>x: 1</p> <p>o: 1</p> <p>x is at (3,3)</p> <p>no piece to jump in SE direction</p> <p>board:</p> <table><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td>X</td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr></table>		*		*		*		*	*		*		*		*			*		*		*		*	*		*	X	*		*			*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*		<p>Output:</p> <p>no move is made</p> <p>error and asked to retry</p> <p>State:</p> <p>viableDirections:</p> <p>x: [SE, SW]</p> <p>o: [NE, NW]</p> <p>pieceCount</p> <p>x: 1</p> <p>o: 1</p> <p>State of the board is unchanged</p>
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scanSurroundingPositions(BoardPosition startingPos) –
[test_scanSurroundingPositions_noValidMove]

<p>Input:</p> <p>startingPos = new BoardPosition(0,0)</p> <p>State:</p> <p>pieceCount:</p> <p>x: 1</p> <p>o: 0</p> <p>viableDirections</p> <p>x: [SE,SW]</p> <p>o: [NE, NW]</p> <p>board:</p> <table><tr><td>x</td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr><tr><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td><td>*</td><td></td></tr></table>	x	*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*			*		*		*		*	*		*		*		*		<p>Output:</p> <p>(1,1) “ “</p> <p>(0,3) “ “</p> <p>(2,0) “ “</p> <p>no valid move directions</p> <p>State:</p> <p>State of the board is unchanged</p>
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getDirection(DirectionEnum dir) – [test_getDirection_invalidDirection]

<p>Input: dir = DirectionEnum.NE</p> <p>State:</p> <p>State of the board doesn't affect the function</p>	<p>Output:</p> <p>direction: (-1,1)</p> <p>State:</p> <p>State of the object is unchanged</p>
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What tests did each team member write? Just tell me the names of the functions (unless for some reason multiple team members wrote functions for the same method. In that case, tell me which tests specifically by giving me the test names)

Laura	CheckerBoard(int) whatsAtPos(BoardPosition) getPieceCounts(void)
Nadia	checkPlayerWin(Character) crownPiece(BoardPosition) movePiece(BoardPosition, DirectionEnum)
Keerthi	jumpPiece(BoardPosition, DirectionEnum) scanSurroundingPositions(BoardPosition) getDirection(DirectionEnum)
Meher	placePiece(BoardPosition, char) getViableDirections(void)