

COM2001: Advanced Programming Topics

Assignment 2

Test Results

Functions

Variable names:

- hand** : A hand
- brd** : A board
- seed** : An integer used to initialise the random number generator
- p1** : Player 1
- p2** : Player 2

**Note: The player will only be called if there is at least one domino in its hand which can be played. Therefore, we do not need a test case where the hand is empty.*

1. simplePlayer

- **Test Case**

1. A **random hand** is given to an **empty board**
2. A **first domino** in the hand which will go to **L** is given to a **random board**
3. A **first domino** in the hand which will go to **R** is given to a **random board**

Test Case	hand	brd	Expected Result	Actual Result	Status
1	[(3,3), (5,4), (6,1)]	[]	((3,3),L)	((3,3),L)	Pass
	[(1,2), (4,4)]	[]	((1,2),L)	((1,2),L)	Pass
2	[(3,3), (5,4), (6,1)]	[(3,1), (1,2)]	((3,3),L)	((3,3),L)	Pass
	[(3,3), (5,4), (6,2)]	[(6,1), (1,2)]	((6,2),L)	((6,2),L)	Pass
3	[(3,2), (5,4), (6,2)]	[(6,1), (1,2)]	((3,2),R)	((3,2),R)	Pass
	[(3,4), (5,4), (4,2)]	[(6,1), (1,2)]	((4,2),R)	((4,2),R)	Pass

Table 1. Test results of simplePlayer

2. hsdPlayer

- **Test Case**

1. A **random hand** is given to an **empty board**
2. A **random hand** which the highest scoring domino will be played at **L** is given to a **random board**
3. A **random hand** which the highest scoring domino will be played at **R** is given to a **random board**

Test Case	hand	brd	Expected Result	Actual Result	Status
1	[(3,3), (5,4), (6,1)]	[]	((5,4),R)	((5,4),R)	Pass
	[(1,2), (4,4)]	[]	((1,2),R)	((1,2),R)	Pass
2	[(5,4), (2,3), (4,1)]	[(4,2), (2,5)]	((5,4),L)	((5,4),L)	Pass
	[(6,6), (1,4), (6,3)]	[(6,2), (2,3)]	((6,6),L)	((6,6),L)	Pass
3	[(2,6), (3,2), (2,0)]	[(3,1), (1,2)]	((2,6),R)	((2,6),R)	Pass
	[(1,2), (1,1)]	[(5,5), (5,1)]	((1,2),R)	((1,2),R)	Pass

Table 2. Test results of hsdPlayer

3. shuffleDoms

- **Test Case:** Test whether **different seed** return **different order** of dominoes set

seed	Actual Result	Status
123	[(3,1), (1,0), (4,3), (6,3), (6,6), ..., (5,4), (3,3), (3,2), (4,0), (5,3)]	Pass
42	[(4,4), (3,0), (3,2), (5,1), (1,1), ..., (5,2), (1,0), (3,3), (4,3), (5,3)]	Pass
110	[(3,2), (1,1), (4,0), (5,0), (3,1), ..., (6,0), (6,5), (5,5), (5,2), (4,4)]	Pass

Table 3. Test results of shuffleDoms

4. playDomsRound

- Test Case

1. Both Player 1 and Player 2 are **simplePlayer**
2. Player 1 is **simplePlayer**, Player 2 is **hsdPlayer**
3. Player 1 is **hsdPlayer**, Player 2 is **simplePlayer**
4. Both Player 1 and Player 2 are **hsdPlayer**

*For full debugging log, see page 5 - 8

Test Case	p1	p2	seed	Expected Result	Actual Result	Status
1	simplePlayer	simplePlayer	42	(12,9)	(12,9)	Pass
	simplePlayer	simplePlayer	110	(7,4)	(7,4)	Pass
	simplePlayer	simplePlayer	123	(1,7)	(1,7)	Pass
2	simplePlayer	hsdPlayer	42	(11,12)	(11,12)	Pass
	simplePlayer	hsdPlayer	110	(1,14)	(1,14)	Pass
	simplePlayer	hsdPlayer	123	(1,11)	(1,11)	Pass
3	hsdPlayer	simplePlayer	42	(16,10)	(16,10)	Pass
	hsdPlayer	simplePlayer	110	(22,3)	(22,3)	Pass
	hsdPlayer	simplePlayer	123	(16,15)	(16,15)	Pass
4	hsdPlayer	hsdPlayer	42	(29,19)	(29,19)	Pass
	hsdPlayer	hsdPlayer	110	(16,19)	(16,19)	Pass
	hsdPlayer	hsdPlayer	123	(7,19)	(7,19)	Pass

Table 4. Test results of playDomsRound

Conclusion: **hsdPlayer** always win **simplePlayer**

Test Execution Logs

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*Dominoes> simplePlayer [(3,3), (5,4), (6,1)] []
((3,3),L)

*Dominoes> simplePlayer [(1,2), (4,4)] []
((1,2),L)

*Dominoes> simplePlayer [(3,3), (5,4), (6,1)] [(3,1), (1,2)]
((3,3),L)

*Dominoes> simplePlayer [(3,3), (5,4), (6,2)] [(6,1), (1,2)]
((6,2),L)

*Dominoes> simplePlayer [(3,2), (5,4), (6,2)] [(6,1), (1,2)]
((3,2),R)

*Dominoes> simplePlayer [(3,4), (5,4), (4,2)] [(6,1), (1,2)]
((4,2),R)
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*Dominoes> hsdPlayer [(3,3), (5,4), (6,1)] []
((5,4),R)

*Dominoes> hsdPlayer [(1,2), (4,4)] []
((1,2),R)

*Dominoes> hsdPlayer [(5,4), (2,3), (4,1)] [(4,2), (2,5)]
((5,4),L)

*Dominoes> hsdPlayer [(6,6), (1,4), (6,3)] [(6,2), (2,3)]
((6,6),L)

*Dominoes> hsdPlayer [(2,6), (3,2), (2,0)] [(3,1), (1,2)]
((2,6),R)

*Dominoes> hsdPlayer [(1,2), (1,1)] [(5,5), (5,1)]
((1,2),R)
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*Dominoes> shuffleDoms 42
[(4,4),(3,0),(3,2),(5,1),(1,1),(6,6),(2,0),(4,2),(4,0),(5,5),(6,0),(5,4),(0,0),(2,2),(3,1),(2,1),(6,4),(5,0),(6,1),(6,5),(6,3),(4,1),(6,2),(5,2),(1,0),(3,3),(4,3),(5,3)]

*Dominoes> shuffleDoms 110
[(3,2),(1,1),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2),(5,4),(5,1),(0,0),(4,2),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1),(6,2),(5,3),(2,1),(3,3),(6,3),(6,0),(6,5),(5,5),(5,2),(4,4)]

*Dominoes> shuffleDoms 123
[(3,1),(1,0),(4,3),(6,3),(6,6),(6,4),(1,1),(6,1),(2,1),(3,0),(6,0),(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2),(6,2),(4,1),(5,1),(0,0),(6,5),(5,4),(3,3),(3,2),(4,0),(5,3)]
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*Dominoes> playDomsRound simplePlayer simplePlayer 42
"Player 1 plays (4,4) at L scoring 0, board is [(4,4)], hand is [(3,0),(3,2),(5,1),(1,1),(6,6),(2,0),(4,2),(4,0)]"
"Player 2 plays (5,4) at L scoring 0, board is [(5,4),(4,4)], hand is [(5,5),(6,0),(0,0),(2,2),(3,1),(2,1),(6,4),(5,0)]"
"Player 1 plays (5,1) at L scoring 3, board is [(1,5),(5,4),(4,4)], hand is [(3,0),(3,2),(1,1),(6,6),(2,0),(4,2),(4,0)]"
"Player 2 plays (3,1) at L scoring 0, board is [(3,1),(1,5),(5,4),(4,4)], hand is [(5,5),(6,0),(0,0),(2,2),(2,1),(6,4),(5,0)]"
"Player 1 plays (3,0) at L scoring 0, board is [(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(3,2),(1,1),(6,6),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,0) at L scoring 0, board is [(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(5,5),(0,0),(2,2),(2,1),(6,4),(5,0)]"
"Player 1 plays (6,6) at L scoring 4, board is [(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(3,2),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,4) at L scoring 4, board is [(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(5,5),(0,0),(2,2),(2,1),(5,0)]"
"Player 1 plays (4,2) at L scoring 2, board is [(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(3,2),(1,1),(2,0),(4,0)]"
"Player 2 plays (2,2) at L scoring 4, board is [(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(5,5),(0,0),(2,1),(5,0)]"
"Player 1 plays (3,2) at L scoring 0, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4)], hand is [(1,1),(2,0),(4,0)]"
"Player 1 plays (4,0) at R scoring 1, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4),(4,0)], hand is [(1,1),(2,0)]"
"Player 2 plays (0,0) at R scoring 1, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4),(4,0),(0,0)], hand is [(5,5),(2,1),(5,0)]"
"Player 1 plays (2,0) at R scoring 1, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4),(4,0),(0,0),(0,2)], hand is [(1,1)]"
"Player 2 plays (2,1) at R scoring 0, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4),(4,0),(0,0),(0,2),(2,1)], hand is [(5,5),(5,0)]"
"Player 1 plays (1,1) at R scoring 1, board is [(3,2),(2,2),(2,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,4),(4,4),(4,0),(0,0),(0,2),(2,1),(1,1)], hand is []"
(12,9)

*Dominoes> playDomsRound simplePlayer hsdPlayer 42
"Player 1 plays (4,4) at L scoring 0, board is [(4,4)], hand is [(3,0),(3,2),(5,1),(1,1),(6,6),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,4) at R scoring 0, board is [(4,4),(4,6)], hand is [(5,5),(6,0),(5,4),(0,0),(2,2),(3,1),(2,1),(5,0)]"
"Player 1 plays (6,6) at R scoring 4, board is [(4,4),(4,6),(6,6)], hand is [(3,0),(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,0) at R scoring 0, board is [(4,4),(4,6),(6,6),(6,0)], hand is [(5,5),(5,4),(0,0),(2,2),(3,1),(2,1),(5,0)]"
"Player 1 plays (3,0) at R scoring 0, board is [(4,4),(4,6),(6,6),(6,0),(0,3)], hand is [(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (3,1) at R scoring 3, board is [(4,4),(4,6),(6,6),(6,0),(0,3),(3,1)], hand is [(5,5),(5,4),(0,0),(2,2),(2,1),(5,0)]"
"Player 1 plays (5,1) at R scoring 0, board is [(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5)], hand is [(3,2),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (5,5) at R scoring 6, board is [(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5)], hand is [(5,4),(0,0),(2,2),(2,1),(5,0)]"
"Player 1 plays (4,2) at L scoring 4, board is [(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5)], hand is [(3,2),(1,1),(2,0),(4,0)]"
"Player 2 plays (5,4) at R scoring 2, board is [(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4)], hand is [(0,0),(2,2),(2,1),(5,0)]"
"Player 1 plays (3,2) at L scoring 0, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4)], hand is [(1,1),(2,0),(4,0)]"
"Player 1 plays (4,0) at R scoring 1, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0)], hand is [(1,1),(2,0)]"
"Player 2 plays (0,0) at R scoring 1, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0),(0,0)], hand is [(2,2),(2,1),(5,0)]"
"Player 1 plays (2,0) at R scoring 1, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0),(0,0),(0,2)], hand is [(1,1)]"
"Player 2 plays (2,2) at R scoring 0, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0),(0,0),(0,2),(2,2)], hand is [(2,1),(5,0)]"
"Player 2 plays (2,1) at R scoring 0, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0),(0,0),(0,2),(2,2),(2,1)], hand is [(5,0)]"
"Player 1 plays (1,1) at R scoring 1, board is [(3,2),(2,4),(4,4),(4,6),(6,6),(6,0),(0,3),(3,1),(1,5),(5,5),(5,4),(4,0),(0,0),(0,2),(2,2),(2,1),(1,1)], hand is []"
(11,12)

*Dominoes> playDomsRound hsdPlayer simplePlayer 42
"Player 1 plays (6,6) at R scoring 4, board is [(6,6)], hand is [(4,4),(3,0),(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,0) at L scoring 4, board is [(0,6),(6,6)], hand is [(5,5),(5,4),(0,0),(2,2),(3,1),(2,1),(6,4),(5,0)]"
"Player 1 plays (3,0) at L scoring 8, board is [(3,0),(0,6),(6,6)], hand is [(4,4),(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (3,1) at L scoring 0, board is [(1,3),(3,0),(0,6),(6,6)], hand is [(5,5),(5,4),(0,0),(2,2),(2,1),(6,4),(5,0)]"
"Player 1 plays (5,1) at L scoring 0, board is [(5,1),(1,3),(3,0),(0,6),(6,6)], hand is [(4,4),(3,2),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (5,5) at L scoring 0, board is [(5,5),(5,1),(1,3),(3,0),(0,6),(6,6)], hand is [(5,4),(0,0),(2,2),(2,1),(6,4),(5,0)]"
"Player 2 plays (5,4) at L scoring 0, board is [(4,5),(5,5),(5,1),(1,3),(3,0),(0,6),(6,6)], hand is [(0,0),(2,2),(2,1),(6,4),(5,0)]"
"Player 1 plays (4,4) at L scoring 4, board is [(4,4),(4,5),(5,5),(5,1),(1,3),(3,0),(0,6),(6,6)], hand is [(3,2),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,4) at L scoring 6, board is [(6,4),(4,4),(4,5),(5,5),(5,1),(1,3),(3,0),(0,6),(6,6)], hand is [(0,0),(2,2),(2,1),(5,0)]"
(16,10)

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*Dominoes> playDomsRound hsdPlayer hsdPlayer 42
"Player 1 plays (6,6) at R scoring 4, board is [(6,6)], hand is [(4,4),(3,0),(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,0) at R scoring 4, board is [(6,6),(6,0)], hand is [(5,5),(5,4),(0,0),(2,2),(3,1),(2,1),(6,4),(5,0)]"
"Player 1 plays (3,0) at R scoring 8, board is [(6,6),(6,0),(0,3)], hand is [(4,4),(3,2),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (6,4) at L scoring 0, board is [(4,6),(6,6),(6,0),(0,3)], hand is [(5,5),(5,4),(0,0),(2,2),(3,1),(2,1),(5,0)]"
"Player 1 plays (3,2) at R scoring 2, board is [(4,6),(6,6),(6,0),(0,3),(3,2)], hand is [(4,4),(5,1),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (2,1) at R scoring 1, board is [(4,6),(6,6),(6,0),(0,3),(3,2),(2,1)], hand is [(5,5),(5,4),(0,0),(2,2),(3,1),(5,0)]"
"Player 1 plays (5,1) at R scoring 3, board is [(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5)], hand is [(4,4),(1,1),(2,0),(4,2),(4,0)]"
"Player 2 plays (5,4) at L scoring 2, board is [(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5)], hand is [(5,5),(0,0),(2,2),(3,1),(5,0)]"
"Player 2 plays (5,5) at R scoring 8, board is [(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(0,0),(2,2),(3,1),(5,0)]"
"Player 2 plays (5,0) at L scoring 2, board is [(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(0,0),(2,2),(3,1)]"
"Player 1 plays (2,0) at L scoring 4, board is [(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(4,4),(1,1),(4,2),(4,0)]"
"Player 2 plays (2,2) at L scoring 0, board is [(2,2),(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(0,0),(3,1)]"
"Player 1 plays (4,2) at L scoring 0, board is [(4,2),(2,2),(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(4,4),(1,1),(4,0)]"
"Player 1 plays (4,4) at L scoring 6, board is [(4,4),(4,2),(2,2),(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(1,1),(4,0)]"
"Player 1 plays (4,0) at L scoring 2, board is [(0,4),(4,4),(4,2),(2,2),(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(1,1)]"
"Player 2 plays (0,0) at L scoring 2, board is [(0,0),(0,4),(4,4),(4,2),(2,2),(2,0),(0,5),(5,4),(4,6),(6,6),(6,0),(0,3),(3,2),(2,1),(1,5),(5,5)], hand is [(3,1)]"
(29,19)

*Dominoes> playDomsRound simplePlayer simplePlayer 110
"Player 1 plays (3,2) at L scoring 1, board is [(3,2)], hand is [(1,1),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (4,2) at R scoring 0, board is [(3,2),(2,4)], hand is [(5,1),(0,0),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (4,0) at R scoring 1, board is [(3,2),(2,4),(4,0)], hand is [(1,1),(5,0),(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (0,0) at R scoring 1, board is [(3,2),(2,4),(4,0),(0,0)], hand is [(5,1),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (5,0) at R scoring 0, board is [(3,2),(2,4),(4,0),(0,0),(0,5)], hand is [(1,1),(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (5,1) at R scoring 0, board is [(3,2),(2,4),(4,0),(0,0),(0,5),(5,1)], hand is [(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (1,1) at R scoring 1, board is [(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1)], hand is [(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (1,0) at R scoring 1, board is [(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0)], hand is [(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (3,1) at L scoring 0, board is [(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0)], hand is [(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (2,0) at R scoring 1, board is [(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2)], hand is [(6,4),(3,0),(6,6),(6,1)]"
"Player 1 plays (4,1) at L scoring 2, board is [(4,1),(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2)], hand is [(4,3),(2,2),(5,4)]"
"Player 2 plays (6,4) at L scoring 0, board is [(6,4),(4,1),(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2)], hand is [(3,0),(6,6),(6,1)]"
"Player 1 plays (2,2) at R scoring 2, board is [(6,4),(4,1),(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2),(2,2)], hand is [(4,3),(5,4)]"
"Player 2 plays (6,6) at L scoring 0, board is [(6,6),(6,4),(4,1),(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2),(2,2)], hand is [(3,0),(6,1)]"
"Player 2 plays (6,1) at L scoring 1, board is [(1,6),(6,6),(6,4),(4,1),(1,3),(3,2),(2,4),(4,0),(0,0),(0,5),(5,1),(1,1),(1,0),(0,2),(2,2)], hand is [(3,0)]"
(7,4)

*Dominoes> playDomsRound simplePlayer hsdPlayer 110
"Player 1 plays (3,2) at L scoring 1, board is [(3,2)], hand is [(1,1),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (2,0) at R scoring 1, board is [(3,2),(2,0)], hand is [(5,1),(0,0),(4,2),(1,0),(6,4),(3,0),(6,6),(6,1)]"
"Player 1 plays (4,0) at R scoring 0, board is [(3,2),(2,0),(0,4)], hand is [(1,1),(5,0),(3,1),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (6,4) at R scoring 3, board is [(3,2),(2,0),(0,4),(4,6)], hand is [(5,1),(0,0),(4,2),(1,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (3,1) at L scoring 0, board is [(1,3),(3,2),(2,0),(0,4),(4,6)], hand is [(1,1),(5,0),(4,1),(4,3),(2,2),(5,4)]"
"Player 2 plays (6,1) at L scoring 4, board is [(6,1),(1,3),(3,2),(2,0),(0,4),(4,6)], hand is [(5,1),(0,0),(4,2),(1,0),(3,0),(6,6)]"
"Player 2 plays (6,6) at R scoring 6, board is [(6,1),(1,3),(3,2),(2,0),(0,4),(4,6),(6,6)], hand is [(5,1),(0,0),(4,2),(1,0),(3,0)]"
(1,14)

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*Dominoes> playDomsRound hsdPlayer simplePlayer 110
"Player 1 plays (5,4) at R scoring 3, board is [(5,4)], hand is [(3,2),(1,1),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2)]"
"Player 2 plays (5,1) at L scoring 1, board is [(1,5),(5,4)], hand is [(0,0),(4,2),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (1,1) at L scoring 2, board is [(1,1),(1,5),(5,4)], hand is [(3,2),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2)]"
"Player 2 plays (4,2) at R scoring 0, board is [(1,1),(1,5),(5,4),(4,2)], hand is [(0,0),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (4,1) at L scoring 2, board is [(4,1),(1,1),(1,5),(5,4),(4,2)], hand is [(3,2),(4,0),(5,0),(3,1),(4,3),(2,2)]"
"Player 2 plays (6,4) at L scoring 0, board is [(6,4),(4,1),(1,1),(1,5),(5,4),(4,2)], hand is [(0,0),(1,0),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (3,2) at R scoring 3, board is [(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3)], hand is [(4,0),(5,0),(3,1),(4,3),(2,2)]"
"Player 2 plays (3,0) at R scoring 2, board is [(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0)], hand is [(0,0),(1,0),(2,0),(6,6),(6,1)]"
"Player 1 plays (4,0) at R scoring 2, board is [(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0),(0,4)], hand is [(5,0),(3,1),(4,3),(2,2)]"
"Player 2 plays (6,6) at L scoring 0, board is [(6,6),(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0),(0,4)], hand is [(0,0),(1,0),(2,0),(6,1)]"
"Player 1 plays (4,3) at R scoring 8, board is [(6,6),(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0),(0,4),(4,3)], hand is [(5,0),(3,1),(2,2)]"
"Player 2 plays (6,1) at L scoring 0, board is [(1,6),(6,6),(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0),(0,4),(4,3)], hand is [(0,0),(1,0),(2,0)]"
"Player 1 plays (3,1) at L scoring 2, board is [(3,1),(1,6),(6,6),(6,4),(4,1),(1,1),(1,5),(5,4),(4,2),(2,3),(3,0),(0,4),(4,3)], hand is [(5,0),(2,2)]"
(22,3)

*Dominoes> playDomsRound hsdPlayer hsdPlayer 110
"Player 1 plays (5,4) at R scoring 3, board is [(5,4)], hand is [(3,2),(1,1),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2)]"
"Player 2 plays (5,1) at L scoring 1, board is [(1,5),(5,4)], hand is [(0,0),(4,2),(1,0),(6,4),(2,0),(3,0),(6,6),(6,1)]"
"Player 1 plays (1,1) at L scoring 2, board is [(1,1),(1,5),(5,4)], hand is [(3,2),(4,0),(5,0),(3,1),(4,1),(4,3),(2,2)]"
"Player 2 plays (6,1) at L scoring 2, board is [(6,1),(1,1),(1,5),(5,4)], hand is [(0,0),(4,2),(1,0),(6,4),(2,0),(3,0),(6,6)]"
"Player 1 plays (4,3) at R scoring 3, board is [(6,1),(1,1),(1,5),(5,4),(4,3)], hand is [(3,2),(4,0),(5,0),(3,1),(4,1),(2,2)]"
"Player 2 plays (6,6) at L scoring 8, board is [(6,6),(6,1),(1,1),(1,5),(5,4),(4,3)], hand is [(0,0),(4,2),(1,0),(6,4),(2,0),(3,0)]"
"Player 1 plays (3,2) at R scoring 0, board is [(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2)], hand is [(4,0),(5,0),(3,1),(4,1),(2,2)]"
"Player 2 plays (2,0) at R scoring 4, board is [(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0)], hand is [(0,0),(4,2),(1,0),(6,4),(3,0)]"
"Player 1 plays (5,0) at R scoring 0, board is [(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(4,0),(3,1),(4,1),(2,2)]"
"Player 2 plays (6,4) at L scoring 3, board is [(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(0,0),(4,2),(1,0),(3,0)]"
"Player 1 plays (4,1) at L scoring 2, board is [(1,4),(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(4,0),(3,1),(2,2)]"
"Player 2 plays (1,0) at L scoring 1, board is [(0,1),(1,4),(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(0,0),(4,2),(3,0)]"
"Player 1 plays (4,0) at L scoring 3, board is [(4,0),(0,1),(1,4),(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(3,1),(2,2)]"
"Player 2 plays (4,2) at L scoring 0, board is [(2,4),(4,0),(0,1),(1,4),(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(0,0),(3,0)]"
"Player 1 plays (2,2) at L scoring 3, board is [(2,2),(2,4),(4,0),(0,1),(1,4),(4,6),(6,6),(6,1),(1,1),(1,5),(5,4),(4,3),(3,2),(2,0),(0,5)], hand is [(3,1)]"
(16,19)

*Dominoes> playDomsRound simplePlayer simplePlayer 123
"Player 1 plays (3,1) at L scoring 0, board is [(3,1)], hand is [(1,0),(4,3),(6,3),(6,6),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (3,0) at L scoring 0, board is [(0,3),(3,1)], hand is [(6,0),(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (1,0) at L scoring 0, board is [(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(1,1),(6,1),(2,1)]"
"Player 1 plays (1,1) at L scoring 1, board is [(1,1),(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(6,1),(2,1)]"
"Player 1 plays (6,1) at L scoring 0, board is [(6,1),(1,1),(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(2,1)]"
"Player 2 plays (6,0) at L scoring 0, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1)], hand is [(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (2,1) at R scoring 0, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2)], hand is [(4,3),(6,3),(6,6),(6,4)]"
"Player 2 plays (5,0) at L scoring 0, board is [(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2)], hand is [(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 2 plays (4,2) at R scoring 3, board is [(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4)], hand is [(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (4,3) at R scoring 0, board is [(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3)], hand is [(6,3),(6,6),(6,4)]"
"Player 2 plays (5,5) at L scoring 0, board is [(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3)], hand is [(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (6,3) at R scoring 0, board is [(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6)], hand is [(6,6),(6,4)]"
"Player 2 plays (5,2) at L scoring 0, board is [(2,5),(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6)], hand is [(2,0),(4,4),(2,2)]"
"Player 1 plays (6,6) at R scoring 0, board is [(2,5),(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6),(6,6)], hand is [(6,4)]"
"Player 2 plays (2,0) at L scoring 4, board is [(0,2),(2,5),(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6),(6,6)], hand is [(4,4),(2,2)]"
"Player 1 plays (6,4) at R scoring 0, board is [(0,2),(2,5),(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6),(6,6),(6,4)], hand is []"
"Player 2 plays (4,4) at R scoring 0, board is [(0,2),(2,5),(5,5),(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,4),(4,3),(3,6),(6,6),(6,4),(4,4)], hand is [(2,2)]"
(1,7)

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*Dominoes> playDomsRound simplePlayer hsdPlayer 123
"Player 1 plays (3,1) at L scoring 0, board is [(3,1)], hand is [(1,0),(4,3),(6,3),(6,6),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (3,0) at L scoring 0, board is [(0,3),(3,1)], hand is [(6,0),(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (1,0) at L scoring 0, board is [(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(1,1),(6,1),(2,1)]"
"Player 1 plays (1,1) at L scoring 1, board is [(1,1),(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(6,1),(2,1)]"
"Player 1 plays (6,1) at L scoring 0, board is [(6,1),(1,1),(1,0),(0,3),(3,1)], hand is [(4,3),(6,3),(6,6),(6,4),(2,1)]"
"Player 2 plays (6,0) at L scoring 0, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1)], hand is [(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (2,1) at R scoring 0, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2)], hand is [(4,3),(6,3),(6,6),(6,4)]"
"Player 2 plays (5,2) at R scoring 1, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,5)], hand is [(5,0),(4,2),(5,5),(2,0),(4,4),(2,2)]"
"Player 2 plays (5,5) at R scoring 2, board is [(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,5),(5,5)], hand is [(5,0),(4,2),(2,0),(4,4),(2,2)]"
"Player 2 plays (5,0) at L scoring 8, board is [(5,0),(0,6),(6,1),(1,1),(1,0),(0,3),(3,1),(1,2),(2,5),(5,5)], hand is [(4,2),(2,0),(4,4),(2,2)]"
(1,11)

*Dominoes> playDomsRound hsdPlayer simplePlayer 123
"Player 1 plays (6,6) at R scoring 4, board is [(6,6)], hand is [(3,1),(1,0),(4,3),(6,3),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (6,0) at L scoring 4, board is [(0,6),(6,6)], hand is [(3,0),(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (6,3) at R scoring 1, board is [(0,6),(6,6),(6,3)], hand is [(3,1),(1,0),(4,3),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (3,0) at L scoring 2, board is [(3,0),(0,6),(6,6),(6,3)], hand is [(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (4,3) at R scoring 0, board is [(3,0),(0,6),(6,6),(6,3),(3,4)], hand is [(3,1),(1,0),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (4,2) at R scoring 1, board is [(3,0),(0,6),(6,6),(6,3),(3,4),(4,2)], hand is [(5,0),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (3,1) at L scoring 1, board is [(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2)], hand is [(1,0),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (2,0) at R scoring 0, board is [(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0)], hand is [(5,0),(5,5),(4,4),(5,2),(2,2)]"
"Player 1 plays (6,1) at L scoring 2, board is [(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0)], hand is [(1,0),(6,4),(1,1),(2,1)]"
"Player 2 plays (5,0) at R scoring 0, board is [(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5)], hand is [(5,5),(4,4),(5,2),(2,2)]"
"Player 1 plays (6,4) at L scoring 3, board is [(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5)], hand is [(1,0),(1,1),(2,1)]"
"Player 2 plays (5,5) at R scoring 0, board is [(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5)], hand is [(4,4),(5,2),(2,2)]"
"Player 2 plays (4,4) at L scoring 6, board is [(4,4),(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5)], hand is [(5,2),(2,2)]"
"Player 2 plays (5,2) at R scoring 2, board is [(4,4),(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5),(5,2)], hand is [(2,2)]"
"Player 1 plays (2,1) at R scoring 3, board is [(4,4),(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5),(5,2),(2,1)], hand is [(1,0),(1,1)]"
"Player 1 plays (1,1) at R scoring 2, board is [(4,4),(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5),(5,2),(2,1),(1,1)], hand is [(1,0)]"
"Player 1 plays (1,0) at R scoring 0, board is [(4,4),(4,6),(6,1),(1,3),(3,0),(0,6),(6,6),(6,3),(3,4),(4,2),(2,0),(0,5),(5,5),(5,2),(2,1),(1,1),(1,0)], hand is []"
(16,15)

*Dominoes> playDomsRound hsdPlayer hsdPlayer 123
"Player 1 plays (6,6) at R scoring 4, board is [(6,6)], hand is [(3,1),(1,0),(4,3),(6,3),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (6,0) at R scoring 4, board is [(6,6),(6,0)], hand is [(3,0),(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (6,3) at L scoring 1, board is [(3,6),(6,6),(6,0)], hand is [(3,1),(1,0),(4,3),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (3,0) at R scoring 2, board is [(3,6),(6,6),(6,0),(0,3)], hand is [(5,0),(4,2),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (4,3) at R scoring 0, board is [(3,6),(6,6),(6,0),(0,3),(3,4)], hand is [(3,1),(1,0),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (4,2) at R scoring 1, board is [(3,6),(6,6),(6,0),(0,3),(3,4),(4,2)], hand is [(5,0),(5,5),(2,0),(4,4),(5,2),(2,2)]"
"Player 1 plays (3,1) at L scoring 1, board is [(1,3),(3,6),(6,6),(6,0),(0,3),(3,4),(4,2)], hand is [(1,0),(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (5,2) at R scoring 2, board is [(1,3),(3,6),(6,6),(6,0),(0,3),(3,4),(4,2),(2,5)], hand is [(5,0),(5,5),(2,0),(4,4),(2,2)]"
"Player 1 plays (1,0) at L scoring 1, board is [(0,1),(1,3),(3,6),(6,6),(6,0),(0,3),(3,4),(4,2),(2,5)], hand is [(6,4),(1,1),(6,1),(2,1)]"
"Player 2 plays (5,5) at R scoring 2, board is [(0,1),(1,3),(3,6),(6,6),(6,0),(0,3),(3,4),(4,2),(2,5),(5,5)], hand is [(5,0),(2,0),(4,4),(2,2)]"
"Player 2 plays (5,0) at L scoring 8, board is [(5,0),(0,1),(1,3),(3,6),(6,6),(6,0),(0,3),(3,4),(4,2),(2,5),(5,5)], hand is [(2,0),(4,4),(2,2)]"
(7,19)

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