Post Lab 4 ENSF 409 William Ledingham 30046372 2020-02-25

Exercise 2

Output:

Adding Rectangle, Circle, and Prism objects to the list...

Showing information about objects added to the list:

Shape name: C1

Origin: X-coordinate: 13.0

Y-coordinate: 14.0

Green point Radius: 15.0

Shape name: C2

Origin: X-coordinate: 33.0

Y-coordinate: 34.0

Yellow point Radius: 35.0

Shape name: P1

Origin: X-coordinate: 43.0

Y-coordinate: 44.0

White point Width: 46.0 Length: 45.0 Height: 47.0

Shape name: P2

Origin: X-coordinate: 53.0

Y-coordinate: 54.0

Gray point Width: 56.0 Length: 55.0 Height: 57.0

Shape name: R1

Origin: X-coordinate: 3.0

Y-coordinate: 4.0

Black point Width: 6.0 Length: 5.0

Shape name: R2

Origin: X-coordinate: 23.0

Y-coordinate: 24.0

Black point Width: 26.0 Length: 25.0

Showing area, perimeter, and volume of objects in the list: The area, perimeter, and volume of C1 are: 706.86, 94.25, 0.00 The area, perimeter, and volume of C2 are: 3848.45, 219.91, 0.00 The area, perimeter, and volume of P1 are: 12694.00, 182.00, 97290.00 The area, perimeter, and volume of P2 are: 18814.00, 222.00, 175560.00

The area, perimeter, and volume of R1 are: 30.00, 22.00, 0.00 The area, perimeter, and volume of R2 are: 650.00, 102.00, 0.00

Exercise 3

Sample Output:

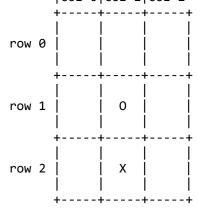
Human Player

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Please enter the name of the 'X' player: Will
What type of player is Will?
  1: Human
  2: Random Player
  3: Blocking Player
  4: Smart Player
Please enter a number in the range 1-4: 1
Please enter the name of the 'O' player: Matt
What type of player is Matt?
  1: Human
  2: Random Player
  3: Blocking Player
  4: Smart Player
Please enter a number in the range 1-4: 1
Referee started the game...
          |col 0|col 1|col 2
    row 0
    row 1
    row 2
Will, what row should your next X be placed in?: 2
Will, what column should your next X be placed in?: 1
          |col 0|col 1|col 2
    row 0
    row 1
```



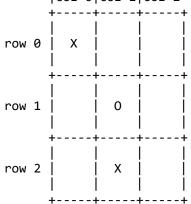
Matt, what row should your next 0 be placed in?: 1

Matt, what column should your next 0 be placed in?: 1 |col 0|col 1|col 2



Will, what row should your next X be placed in?: ∅

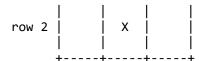
Will, what column should your next X be placed in?: 0 | col 0 | col 1 | col 2



Matt, what row should your next O be placed in?: ∅

Matt, what column should your next 0 be placed in?: 2 |col 0|col 1|col 2

row	0	 X	+ 		-
row	1		 0 		

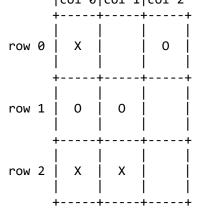


Will, what column should your next X be placed in?: 0 | col 0 | col 1 | col 2

			L .	
row 0	 x 		 0	
row 1		 0 		
row 2	 x 	X		_
	 +	 	 +1	

Matt, what row should your next 0 be placed in?: 1

Matt, what column should your next 0 be placed in?: 0 | col 0 | col 1 | col 2



Will, what row should your next X be placed in?: 2

Will, what column should your next X be placed in?: 2 |col 0|col 1|col 2

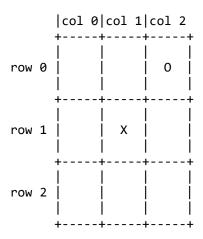
row	0	+ X 		 0 0	-
row	1	† 0 	0	 	-
		+			-

row 2 | X | X | X | X | +----+

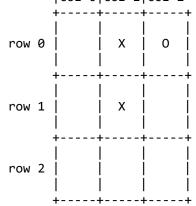
Game Over. Will is the Winner!

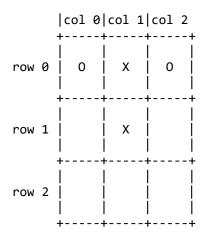
Random Player

Please enter the name of the 'X' player: Will What type of player is Will? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 1 Please enter the name of the 'O' player: Matt What type of player is Matt? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 2 Referee started the game... |col 0|col 1|col 2 row 0 row 1 row 2 Will, what row should your next X be placed in?: 1 Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2 row 0 Χ row 1 row 2



Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2





Will, what row should your next X be placed in?: 2

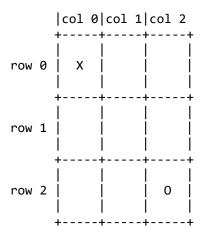
Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2 | +----+

row 0	0	X 	0
row 1		 x 	
row 2		 X 	

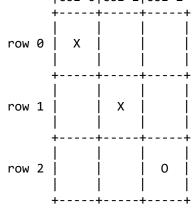
+----+
Game Over. Will is the Winner!

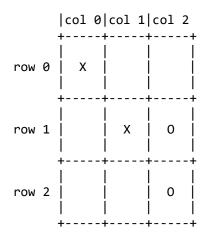
Blocking Player

Please enter the name of the 'X' player: Will What type of player is Will? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 1 Please enter the name of the 'O' player: Matt What type of player is Matt? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 3 Referee started the game... |col 0|col 1|col 2 row 0 row 1 row 2 Will, what row should your next X be placed in?: ∅ Will, what column should your next X be placed in?: ∅ |col 0|col 1|col 2 row 0 Χ row 1 row 2



Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2





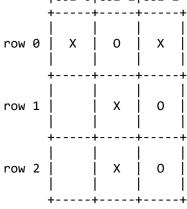
Will, what row should your next X be placed in?: 2

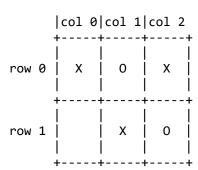
Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2 +----+

row	0	X 		
row	1		X	0
row	2		X	 0
		col 0	col 1	col 2
row	0	 x	0	
row	1		 X	0
row	2		 X 	0

Will, what row should your next X be placed in?: θ

Will, what column should your next X be placed in?: 2 |col 0|col 1|col 2





Will, what column should your next X be placed in?: 0 | col 0 | col 1 | col 2

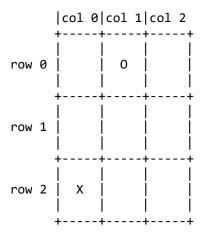
row 0	X	0	X	-
row 1	X	X	0	+
row 2	0	X	0	+ +
				•

Game Over. It is a Tie

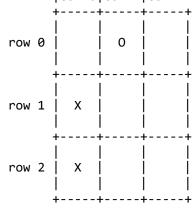
Smart Player

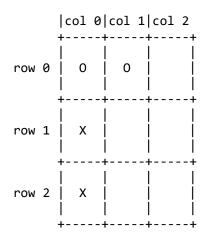
row 2

Please enter the name of the 'X' player: Will What type of player is Will? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 1 Please enter the name of the 'O' player: Matt What type of player is Matt? 1: Human 2: Random Player 3: Blocking Player 4: Smart Player Please enter a number in the range 1-4: 4 Referee started the game... |col 0|col 1|col 2 row 0 row 1 row 2 Will, what row should your next X be placed in?: 2 Will, what column should your next X be placed in?: ∅ |col 0|col 1|col 2 row 0 row 1



Will, what column should your next X be placed in?: 0 | col 0 | col 1 | col 2





Will, what row should your next X be placed in?: 1

Will, what column should your next X be placed in?: 1 |col 0|col 1|col 2 | +----+

row 0	0	0		
row 1	 x 	 X 	 	
row 2	 x 		 	
	col 0	col 1	col 2	
row 0		_		
1 OW 0		0	0	
row 1	 + 	0 X	0 	-
	 	 	0 	

Game Over. Matt is the Winner!