Course: ENSF 409

Student Name: Antonio Santos

Lab number: Lab 4

Exercise 2

```
Shape name: Cl
Origin: X-coordinate: 13.0
Green point
Radius: 15.0
Shape name: C2
Origin: X-coordinate: 33.0
Yellow point
Shape name: P1
Origin: X-coordinate: 43.0
White point
Length: 45.0
Shape name: P2
Gray point
Length: 55.0
Shape name: R1
Origin: X-coordinate: 3.0
Black point
Shape name: R2
Origin: X-coordinate: 23.0
Black point
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.
```

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

Showing information about objects added to the list:

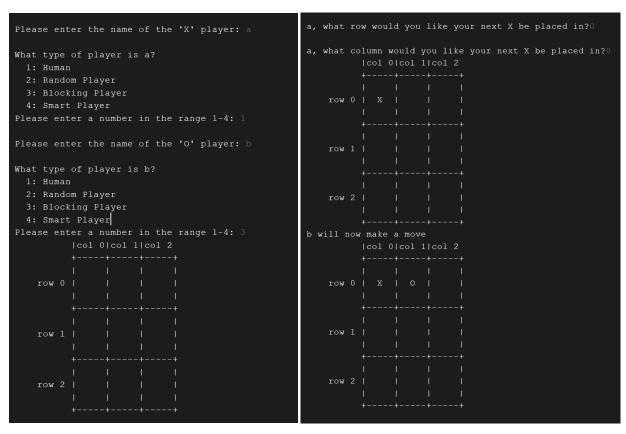
Exercise 3

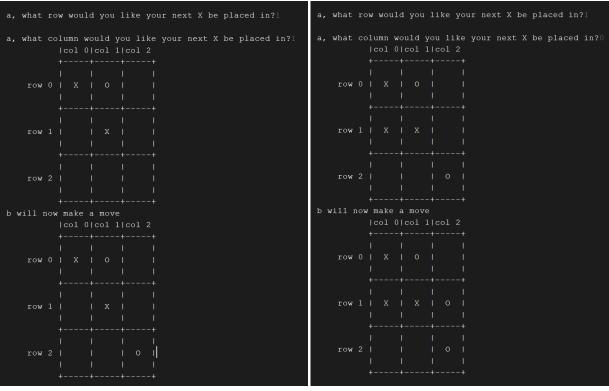
Human vs Random

```
a, what row would you like your next X be placed in?0
                                                      a, what column would you like your next X be placed in?0
What type of player is a?
 1: Human
  2: Random Player
                                                          row 0 | X
  4: Smart Player
                                                          row 1 |
What type of player is b?
 1: Human
  2: Random Player
                                                          row 2 |
  3: Blocking Player
                                                      b will now make a move
    row 0 |
                                                          row 0 I
                                                          row 1 |
    row 2 |
                                                          row 2 |
```



Human vs Blocking





a, what row would you like your next X be placed in $\ensuremath{?0}$	
a, what column would you like your next X be placed in?2 col 0 col 1 col 2 ++	
row 0 X 0 X 	
	a, what row would you like your next X be placed in?2
+++ 	a, what column would you like your next X be placed in?1 col 0 col 1 col 2 +++
+++ b will now make a move col 0 col 1 col 2 +++	
row 0 X 0 X 	
row 1 X X O	row 2 0 X 0
	+++ GAME OVER: game ended in a tie Game ended

Human vs Smart

