Lab 10

For this lab, we will be using the Football.java, Soccer.java, Tennis.java and Main.java on the website.

Part 1. Currently main() lets you pick which sport you want information about by making one variable within each if-statement. Use inheritance to move all similar parts of these classes to some parent class. Then modify main to move use the same variable for each if-statement (this lets you move the displayInformation() outside of the if-statements.

Example 1 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer or tennis

tennis
Area played in: 195
Number of matches: 3
Number of players: 1
Points per score: 1
Points per set: 6

Part 2. Add another layer of categorization for “timed sports” and change the relationships of the classes appropriately.

Part 3. Add volleyball as an option. What do you think is the best way to do this?

Example 1 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer, tennis or volleyball?
volleyball
Area played in: 162
Net height: 2.43
Number of players: 6
Points per score: 1
Points per set: 15

Part 4. Add an additional question when selecting Tennis whether this is single or doubles. What is the best way to do this part?

Example 1 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer or tennis
tennis
Singles or doubles?
singles
Area played in: 195
Number of matches: 3
Number of players: 1
Points per score: 1
Points per sets: 6

Example 2 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer or tennis
tennis
Singles or doubles?
doubles
Area played in: 260
Number of matches: 3
Number of players: 2
Points per score: 1
Points per sets: 6

Part 5. If they choose “soccer”, have a 50% chance a riot happens shown after the display information. **You cannot use the “choice” variable to determine this nor put it inside the displayInformation() method.**

Example 1 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer or tennis
soccer
Area played in: 7000
Game duration: 90
Number of players: 11
Points per score: 1
Substitutions: 3

Example 2 (user input is underlined):
What sport do you wish to see information about?
The options are: football, soccer or tennis
soccer
Area played in: 7000
Game duration: 90
Number of players: 11
Points per score: 1
Substitutions: 3
People are rioting in the streets!