COP 4814 Lab: Sailboat Racing Simulator

Create a Sailboat Racing Simulator program that uses the Observer pattern with boat race scores in much the same way our textbook used weather data. The **LatestScoresDisplay** class is an observer that receives the list of boats from the **RaceData** class. I have written a test class for you (*SailboatRacesSimulator.java*).

The **LatestScoresDisplay** class implements the Observer interface, and it must also contain a display method that shows the current race results like this (shown for the first round of test data):

```
--- Race Results ----
Moby=82.50, Enterprise=54.10, Ticonderoga=494.00, Kialoa=202.00,
```

Also create the RaceData class, which implements the Subject interface. This calss also contains a method named raceResultsChanged that receives a list of Boat objects:

```
public void raceResultsChanged(List<Boat> boatList ) {
     this.boatList = boatList;
     notifyObservers();
  }
```

Here's the program's required output:

```
--- Race Results ----
Moby=82.50, Enterprise=54.10, Ticonderoga=494.00, Kialoa=202.00,
--- Race Results ----
Moby=251.10, Enterprise=-57.86, Ticonderoga=-1981.25, Kialoa=-386.88,
--- Race Results ----
Moby=1237.66, Enterprise=-44.52, Ticonderoga=9644.97, Kialoa=-38.70,
--- Race Results ----
Moby=-3715.40, Enterprise=202.07, Ticonderoga=3688.41, Kialoa=128.96,
--- Race Results ----
Moby=-5245.91, Enterprise=-54.31, Ticonderoga=-16950.33, Kialoa=-87.94,
```