```java
// Harini. R 192324108
//JP section-2 question-1
package interfacePractice;

interface BikeParts {
    String MAKE = "Oracle Bikes";
    String getHandleBars();
    void setHandleBars(String newValue);
    String getTyres();
    void setTyres(String newValue);
    String getSeatType();
    void setSeatType(String newValue);
}
interface MountainParts {
    String TERRAIN = "off_road";
    String getSuspension();
    void setSuspension(String newValue);
    String getType();
    void setType(String newValue);
}
interface RoadParts {
    String TERRAIN = "track_racing";
    String getTyreWidth();
    void setTyreWidth(String newValue);
    String getPostHeight();
    void setPostHeight(String newValue);
}
class Bike implements BikeParts {
    private String handleBars;
    private String tyres;
    private String seatType;

    @Override
    public String getHandleBars() {
        return handleBars;
    }

    @Override
```

```java
39      public void setHandleBars(String newValue) {
40          this.handleBars = newValue;
41      }
42
43      @Override
44      public String getTyres() {
45          return tyres;
46      }
47
48      @Override
49      public void setTyres(String newValue) {
50          this.tyres = newValue;
51      }
52
53      @Override
54      public String getSeatType() {
55          return seatType;
56      }
57
58      @Override
59      public void setSeatType(String newValue) {
60          this.seatType = newValue;
61      }
62 }
63 class MountainBike extends Bike implements MountainParts {
64      private String suspension;
65      private String type;
66
67      @Override
68      public String getSuspension() {
69          return suspension;
70      }
71
72      @Override
73      public void setSuspension(String newValue) {
74          this.suspension = newValue;
75      }
76
```

```java
77        @Override
78    public String getType() {
79            return type;
80        }
81
82        @Override
83    public void setType(String newValue) {
84            this.type = newValue;
85        }
86 }
87 class RoadBike extends Bike implements RoadParts {
88        private String tyreWidth;
89        private String postHeight;
90
91        @Override
92    public String getTyreWidth() {
93            return tyreWidth;
94        }
95
96        @Override
97    public void setTyreWidth(String newValue) {
98            this.tyreWidth = newValue;
99        }
100
101        @Override
102    public String getPostHeight() {
103            return postHeight;
104        }
105
106        @Override
107    public void setPostHeight(String newValue) {
108            this.postHeight = newValue;
109        }
110 }
111 public class BikeDriver {
112     public static void main(String[] args) {
113         Bike bike = new Bike();
114         MountainBike mountainBike = new MountainBike();
```

```java
115            RoadBike roadBike = new RoadBike();
116
117        bike.setHandleBars("Drop Bars");
118        bike.setTyres("Mountain Tyres");
119        bike.setSeatType("Comfortable Seat");
120
121        mountainBike.setHandleBars("Flat Bars");
122        mountainBike.setTyres("Knobby Tyres");
123        mountainBike.setSeatType("Racing Seat");
124        mountainBike.setSuspension("Full Suspension");
125        mountainBike.setType("Trail Bike");
126
127        roadBike.setHandleBars("Drop Bars");
128        roadBike.setTyres("Thin Tyres");
129        roadBike.setSeatType("Comfortable Seat");
130        roadBike.setTyreWidth("23mm");
131        roadBike.setPostHeight("22");
132        System.out.println("Initial RoadBike Post Height: " + roadBike.getPostHeight());
133        roadBike.setPostHeight("20");
134        System.out.println("Updated RoadBike Post Height: " + roadBike.getPostHeight());
135    }
136 }
137
```

<terminated> BikeDriver [Java Application] C:\Users\harin\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v202404

```
Initial RoadBike Post Height: 22
Updated RoadBike Post Height: 20
```