Inheritance

Create a class named Horse that contains data fields for the name, color, and birth year. Include get and set methods for these fields. Next, create a subclass named RaceHorse, which contains an additional field that holds the number of races in which the horse has competed and additional methods to get and set the new field. Write an application that demonstrates using objects of each class. Save the files as **Horse.java**, **RaceHorse.java**, and **DemoHorses.java**.

Use the following DemoHorses.java as your main program.

```java
public class DemoHorses
{
    public static void main(String args[])
    {
        Horse horse1 = new Horse();
        RaceHorse horse2 = new RaceHorse();
        horse1.setName("Old Paint");
        horse1.setColor("brown");
        horse1.setBirthYear(2009);
        horse2.setName("Champion");
        horse2.setColor("black");
        horse2.setBirthYear(2011);
        horse2.setRaces(4);

        System.out.println(horse1.getName() + " is " +
                horse1.getColor() + " and was born in " + horse1.getBirthYear() + ".");

        System.out.println(horse2.getName() + " is " +
                horse2.getColor() + " and was born in " + horse2.getBirthYear() + ".");

        System.out.println(horse2.getName() + " has been in " + horse2.getRaces() + " races.");
    }
}
```