

```
2 * @author patrickF
5 package week3Src;
6
7 public class Car {
8     // instance variables
9
10    private int tankSize;
11    private String model;
12    private double manfMPG;
13    private Name ownerName;
14
15    // constructor
16    public Car String model, int tank, Name owner, double mpg) {
17        // Overloaded
18        this.model = model;
19        this.tankSize = tank;
20        this.ownerName = owner;
21        this.manfMPG = mpg;
22    }
23
24    // Setters
25    // set value of model
26    public void setModel String value) {
27        this.model = value;
28    }
29
30    // set value of model
31    public void setTankSize(int value) {
32        this.tankSize = value;
33    }
34
35    // set value of mpg
36    public void setManfMPG(double value) {
37        this.manfMPG = value;
38    }
39
40    // set value of ownerName
41    public void setOwnerName Name value) {
42        this.ownerName = value;
43    }
44    // Getters
45
46    // Return model
47    public String getModel() {
48        return this.model;
49    }
50
51    // Return tankSize
52    public int getTankSize() {
53        return this.tankSize;
54    }
55
56    // Return manfMPG
57    public double getManfMPG() {
58        return this.manfMPG;
59    }
60
61    // Return ownerName
62    public Name getOwnerName() {
63        return this.ownerName;
```

```
64     }
65
66     // Methods
67
68     /**
69      * Method to check if the tank has the same size of Size.
70      *
71      * @param size
72      * @return Inefficient fuel use
73      * @return Good fuel consumption
74      * @return Good fuel consumption
75      */
76     public String tankBigger(int size) {
77         if (this.tankSize > size) {
78             return "Inefficient fuel use";
79         } else if (this.tankSize < size) {
80             return "Good fuel consumption";
81         } else {
82             return "Average consumer";
83         }
84     }
85
86
87     public String getOwner() {
88
89         return this.getOwnerName().getFullName();
90     }
91
92     // estimate distance car can travel
93     public double estimateDistance() {
94         // there are 0.22 gallons per litre
95         double GPL = 0.22;
96         return this.tankSize * this.manfMPG * GPL;
97     }
98
99
100
```