

```
1 package chapter06.exercise;
2
3 public class NewCar {
4     private double speed = 0; // 현재 속도
5     private String color; // 자동차 색상
6     private static final double MAX_SPEED = kiloToMile(200); //
    차의 엔진이 허용하는 최대 속력(상수)
7
8     NewCar() {
9     }
10
11     NewCar(String color) {
12         this.color = color;
13     }
14
15     public double getSpeed() {
16         return mileToKilo(speed);
17     }
18
19     public void setSpeed(double speed) {
20         this.speed = kiloToMile(speed);
21     }
22
23     public String getColor() {
24         return color;
25     }
26
27     public void setColor(String color) {
28         this.color = color;
29     }
30
31     public boolean speedUp(double speed) {
32         double newSpeed = this.speed + mileToKilo(speed);
33         if (newSpeed < 0 || newSpeed > MAX_SPEED) {
34             return false;
35         }
36         this.speed = newSpeed;
37         return true;
38     }
39
40     public static double getMaxSpeed() {
41         return mileToKilo(MAX_SPEED);
42     }
43 }
```

```
42     }
43
44     private static double kiloToMile(double distance) {
45         return distance / 1.6;
46     }
47
48     private static double mileToKilo(double distance) {
49         return distance * 1.6;
50     }
51 }
52 }
53 }
54 }
```