Problem 1:

```
1
2  public class Car {
3      private int speed = 0;
4      private double distance = 0;
5
6      public void setSpeed(int speed) {
7          this.speed = speed;
8      }
9      public int getSpeed() {
10         return this.speed;
11     }
12
13     public void setDistance(double distance) {
14         this.distance = distance;
15     }
16     public double getDistance() {
17         return this.distance;
18     }
19
20     public void accelerate(int speed) {
21         if(speed >= 0) {
22             this.speed += speed;
23         }
24     }
25     public void decelerate(int speed) {
26         if(speed >= 0) {
27             this.speed -= speed;
28         }
29         if(this.speed < 0) {
30             this.speed = 0;
31         }
32     }
33
34     public void travel(double hours) {
35         this.distance += this.speed * hours;
36     }
37 }
```

```
1
2  public class Four {
3
4      public static void main(String[] args) {
5          Car Lola = new Car();
6          Lola.setDistance(0);
7          Lola.setSpeed(0);
8
9          System.out.println("Lola has a current speed of "
10         + Lola.getSpeed() + " and has gone a distance of "
11                 + (int)Lola.getDistance());
12
13         Lola.accelerate(50);
14         Lola.travel(1.5);
15         System.out.println("Lola has a current speed of "
16         + Lola.getSpeed() + " and has gone a distance of "
17                 + (int)Lola.getDistance());
18
19         Lola.decelerate(15);
20         Lola.travel(1);
21         System.out.println("Lola has a current speed of "
22         + Lola.getSpeed() + " and has gone a distance of "
23                 + (int)Lola.getDistance());
24     }
25
26 }
```

```
Lola has a current speed of 0 and has gone a distance of 0
Lola has a current speed of 50 and has gone a distance of 75
Lola has a current speed of 35 and has gone a distance of 110
```