Person Class:

```
public class Person {
    private String name;
    private int id;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public int getID() {
        return id;
    }

    public void setID(int id) {
        this.id = id;
    }
}
```

Student Class:

```
public class Student extends Person {
    private String course;

    public String getCourse() {
        return course;
    }
```

```
    public void setCourse(String course) {
        this.course = course;
    }
}
```

Lecturer Class:

```
public class Lecturer extends Person {
    private String programme;

    public String getProgramme() {
        return programme;
    }

    public void setProgramme(String programme) {
        this.programme = programme;
    }
}
```

TestPerson Class:

```
public class TestPerson {
    public static void main(String[] args) {
        // Creating objects for Student and Lecturer classes
        Student student = new Student();
        Lecturer lecturer = new Lecturer();

        // Setting attributes using setters
        student.setName("John");
        student.setID(101);
        student.setCourse("Computer Science");

        lecturer.setName("Dr. Smith");
```

```
        lecturer.setID(201);
        lecturer.setProgramme("Engineering");

        // Displaying attributes using getters
        System.out.println("Student Name: " + student.getName());
        System.out.println("Student ID: " + student.getID());
        System.out.println("Student Course: " + student.getCourse());

        System.out.println("Lecturer Name: " + lecturer.getName());
        System.out.println("Lecturer ID: " + lecturer.getID());
        System.out.println("Lecturer Programme: " + lecturer.getProgramme());
    }
}
```

Exercise 02:

```
public class Animal {}
public class Mammal extends Animal {}
public class Reptile extends Animal {}

public class Dog extends Mammal {
  public static void main(String args[]){
    Animal a = new Animal();
    Mammal m = new Mammal();
    Dog d = new Dog();
    System.out.println(m instanceof Animal);
    System.out.println(d instanceof Mammal);
    System.out.println(d instanceof Animal);
  }
}
```

Output:

true

true

true