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Lab05

Exercise 01:

```java
// Person

public class Person {

    protected String name;
    protected String id;

    public Person(String name, String id) {
        this.name = name;
        this.id = id;
    }

    public String getName() {
        return name;
    }

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

```java
    public String getId() {

        return id;

    }


    public void setId(String id) {

        this.id = id;

    }

}


// Lecturer

public class Lecturer extends Person {

    private String prog;


    public Lecturer(String name, String id, String prog) {

        super(name, id);

        this.prog = prog;

    }


    public String getProg() {

        return prog;

    }


    public void setProg(String prog) {

        this.prog = prog;
```

```java
    }
}

// Student

public class Student extends Person {

    private String course;

    public Student(String name, String id, String course) {
        super(name, id);
        this.course = course;
    }

    public String getCourse() {
        return course;
    }

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

// Test

public class Test {
```

```java
    public static void main(String[] args) {

        Lecturer lecturer = new Lecturer("Dr. Smith", "123456789", "Computer Science");
        System.out.println(lecturer.getName() + " is a lecturer in " + lecturer.getProg());

        Student student = new Student("John Doe", "987654321", "Computer Science");
        System.out.println(student.getName() + " is studying " + student.getCourse());
    }
}
```

Exercise 02:

```java
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); // prints true

        System.out.println(d instanceof Mammal); // prints true

        System.out.println(d instanceof Animal); // prints true
    }
}
```