Employee.java:

```
public class Employee {
    private int empID;
    private String empName;
    private String empDesignation;

    // Getter and Setter for empID
    public int getEmpID() {
        return empID;
    }

    public void setEmpID(int empID) {
        this.empID = empID;
    }

    // Getter and Setter for empName
    public String getEmpName() {
        return empName;
    }

    public void setEmpName(String empName) {
        this.empName = empName;
    }

    // Getter and Setter for empDesignation
    public String getEmpDesignation() {
        return empDesignation;
    }

    public void setEmpDesignation(String empDesignation) {
```

```
        this.empDesignation = empDesignation;
    }
}
```

TestEmployee.java:

```
public class TestEmployee {
    public static void main(String[] args) {
        // Create two objects for Mr. Bogdan and Ms. Bird
        Employee bogdan = new Employee();
        Employee bird = new Employee();

        // Set required values using setters
        bogdan.setEmpID(1);
        bogdan.setEmpName("Bogdan");
        bogdan.setEmpDesignation("Manager");

        bird.setEmpID(2);
        bird.setEmpName("Bird");
        bird.setEmpDesignation("Engineer");

        // Print the details using getters
        System.out.println("Employee ID: " + bogdan.getEmpID());
        System.out.println("Employee Name: " + bogdan.getEmpName());
        System.out.println("Employee Designation: " + bogdan.getEmpDesignation());

        System.out.println("Employee ID: " + bird.getEmpID());
        System.out.println("Employee Name: " + bird.getEmpName());
        System.out.println("Employee Designation: " + bird.getEmpDesignation());
    }
}
```

Exercise 02:

The given code defines two classes SuperB and SubC, and a TestInheritance class to demonstrate inheritance and method overriding.

```
class SuperB {
   int x;
   void setIt(int n) { x = n; }
   void increase() { x = x + 1; }
   void triple() { x = x * 3; };
   int returnIt() { return x; }
}

class SubC extends SuperB {
   void triple() { x = x + 3; } // override existing method
   void quadruple() { x = x * 4; } // new method
}

public class TestInheritance {
   public static void main(String[] args) {
      SuperB b = new SuperB();
      b.setIt(2);
      b.increase();
      b.triple();
      System.out.println(b.returnIt());

      SubC c = new SubC();
      c.setIt(2);
      c.increase();
      c.triple();
      System.out.println(c.returnIt());
   }
```

}

Output:

15

11

Explanation:

The SuperB class has an integer variable x and several methods to manipulate it (setIt, increase, triple, and returnIt). Initially, x is set to 2, then incremented by 1, and then tripled (x = 2 * 3 = 6).

The SubC class extends SuperB and overrides the triple method, which adds 3 to the value of x. It also introduces a new method quadruple, which multiplies x by 4.

In the main method of TestInheritance, we create an instance b of SuperB and call the methods setIt, increase, and triple. The value of x becomes 2 + 1 = 3 and then 3 * 3 = 9. When we call returnIt, it returns the value of x, which is 9.

Next, we create an instance c of SubC and call the same methods. The value of x becomes 2 + 1 = 3 and then 3 + 3 = 6. When we call returnIt, it returns the value of x, which is 6.

So, the final output is:

9

6