Practical 4

1)

Employee class:

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

   public int getEmpID() {
      return empID;
   }

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

   public String getEmpName() {
      return empName;
   }

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

   public String getEmpDesignation() {
      return empDesignation;
   }

   public void setEmpDesignation(String empDesignation) {
```

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

Test Class to Invoke the Employee Class:

```
public class TestEmployee {
    public static void main(String[] args) {
        Employee employee1 = new Employee();
        Employee employee2 = new Employee();

        // Setting values for Mr. Bogdan
        employee1.setEmpID(101);
        employee1.setEmpName("Bogdan");
        employee1.setEmpDesignation("Software Engineer");

        // Setting values for Ms. Bird
        employee2.setEmpID(102);
        employee2.setEmpName("Bird");
        employee2.setEmpDesignation("HR Manager");

        // Printing employee details using getters
        System.out.println("Employee 1 Details:");
        System.out.println("ID: " + employee1.getEmpID());
        System.out.println("Name: " + employee1.getEmpName());
        System.out.println("Designation: " + employee1.getEmpDesignation());

        System.out.println("\nEmployee 2 Details:");
        System.out.println("ID: " + employee2.getEmpID());
        System.out.println("Name: " + employee2.getEmpName());
```

```
        System.out.println("Designation: " + employee2.getEmpDesignation());
    }
}
```

Output:

Employee 1:

ID: 101

Name: Bogdan

Designation: Software Engineer

Employee 2:

ID: 102

Name: Bird

Designation: HR Manager

2)

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

public 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:

9

6