Practical 04

Exercise 01:

```
package com.mycompany.employeetest;
public class EmployeeTest
{
   public static void main(String[] args)
   {
      Employee mrBogdon=new Employee();
      Employee mrBird=new Employee();

      mrBogdon.setEmpID(1001);
      mrBogdon.setEmpName("Mr.Bogdon");
      mrBogdon.setEmpDesignation("Web Developer");

      mrBird.setEmpID(1002);
      mrBird.setEmpName("Mr.Bird");
      mrBird.setEmpDesignation("Fullstack Developer");

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

      System.out.println("\nEmployee ID: "+mrBird.getEmpID());
```

```
        System.out.println("Employee Name: "+mrBird.getEmpName());
        System.out.println("Employee Designation: "+mrBird.getEmpDesignation());
    }
}
package com.mycompany.employeetest;
public class Empolyee
{
    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.empID=empID;
```

```
    }
     public String getEmpDesignation()
    {
       return empDesignation;
    }
    public void setEmpDesignation(String empDesignation)
    {
       this.empDesignation=empDesignation;
    }
}
```

Exercise 02:

Output :

9

6

Class SuperB

- This class represents a superclass containing four methods: setIt, increase, triple, and returnIt.
- The instance variable x's value is set with the setIt method.
- The increase method increases the value of x by 1.
- The value of x is multiplied by three using the triple method.
- The returnIt method returns the current value of x.

class SubC extends SuperB

- In order to become a subclass of SuperB, this class extends the SuperB class.
- Instead of multiplying x by 3, it adds 3 to the x value instead of using the triple function from the superclass.
- Additionally, it adds a new method called quadruple, which multiplies the value of x by 4.

public class TestInheritance

- This class has the main method where the behavior of inheritance is tested.
- In the beginning, it creates a SuperB instance called b.
- Using the setIt method, it initializes b to 2 in this case.
- Following that, it increases b's value by 1, making x equal to 3.
- The triple method is then used to triple the value of b, so x becomes 9.
- Finally, using the returnIt method, it prints the current value of b. then it makes a SubC instance with the name c.
- Using the setIt method, it initializes c to the value 2.
- Then it uses the increase method to increase the C value by 1, so x becomes .
- Then, using the triple method, which is overridden in the SubC class, it triples the value of c, so x becomes 6.
- Using the returned method, it prints the current value of C.

Exercise 03:

Exercise 04:

Output:

true

true

true