**Practical 04 Answers**

**Exercise 01**

**(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;**

}

}

public class T1Employee

{

public static void main(String[] args)

{

Employee **emp1** = new Employee();

bogdan.setempID(1234);

bogdan.setempName("Bogdan");

bogdan.setempdesignation("Manager");

Employee **emp2** = new Employee();

bird.setempID(2);

bird.setempName("Bird");

bird.setempdesignation("Developer");

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**

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;

}

class SubC extends SuperB

{

void triple()

{

x = x + 3;

}

void quadruple()

{

x = x \* 4;

}

}

public class **TInheritance**

{

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() );

}

}

**Exercise 03**

public class **Person**

{

private String name;

private int id;

public Person(String name, int id)

{

this.name = name;

this.id = 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;

}

}

public class **Student extends Person**

{

private String course;

public Student(String name, int id, String course)

{

super(name, id);

this.course = course;

}

public String getCourse()

{

return course;

}

public void setCourse(String course)

{

this.course = course;

}

}

public class **Lecturer extends Person**

{

private String programme;

public Lecturer(String name, int id, String programme)

{

super(name, id);

this.programme = programme;

}

public String **getProgramme()**

{

return programme;

}

public void setProgramme(String programme)

{

this.programme = programme;

}

}

public class ObjPerson

{

public static void main(String[] args)

{

Student student = new Student("KAMAL", 1234, "Software Engineer");

student.setID(5600);

System.out.println("Student Name: " + student.getName());

System.out.println("Student ID: " + student.getID());

System.out.println("Course: " + student.getCourse());

System.out.println();

Lecturer lecturer = new Lecturer("Mr.Nimal", 09876, "Software Engineering");

System.out.println("Lecturer Name: " + lecturer.getName());

System.out.println("Lecturer ID: " + lecturer.getID());

System.out.println("Programme: " + lecturer.getProgramme());

}

}

**Exercise 04**

false

true

true