Exercise 01:

Create a class called “Employee” which has 3 private variables (empID, empName, empDesignation) and create getters and setters for each field. Please note that this has no main method since this is just a blueprint not a application. Now crate a test class to invoke the Employee class. Create two objects for Mr.Bogdan and Ms.Bird and set required values using setters and print them back on the console using getters.

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;

}

}

public class EmployeeTest {

public static void main(String[] args) {

Employee bogdan = new Employee();

bogdan.setEmpID(1);

bogdan.setEmpName("Mr. Bogdan");

bogdan.setEmpDesignation("Manager");

Employee bird = new Employee();

bird.setEmpID(2);

bird.setEmpName("Ms. Bird");

bird.setEmpDesignation("Supervisor");

System.out.println("Employee Details:");

System.out.println("ID: " + bogdan.getEmpID());

System.out.println("Name: " + bogdan.getEmpName());

System.out.println("Designation: " + bogdan.getEmpDesignation());

System.out.println("Employee Details:");

System.out.println("ID: " + bird.getEmpID());

System.out.println("Name: " + bird.getEmpName());

System.out.println("Designation: " + bird.getEmpDesignation());

}

}

Exercise 02:

Develop the following class execute and discuss the answer: Please note that each class stored in separate files. Write down the answer.

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() ); }

}

Answer:

9

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Exercise 04

Develop the following class execute and discuss the answer: Please note that each public class stored in separate files. Write down the answer.

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);

System.out.println(d instanceof Mammal);

System.out.println(d instanceof Animal);

}

}

**Answer:**

true

true

true