**Lab 3**

1. **Create a Class named Animal which includes method like eat() and sleep(). Create a child class of Animal named as Bird and override the parent class methods. Bird class also have a method named as fly(). Create an instance of Animal class and invoke the eat() and sleep() method of this object. Create an instance of Bird class and invoke eat(), sleep() and fly() method.**

**Source Code:**

**class Animal**

**{**

**public void eat()**

**{**

**System.out.println("Animals love eating : ");**

**}**

**public void sleep()**

**{**

**System.out.println("After eating they love to sleep : ");**

**}**

**}**

**class Bird extends Animal**

**{**

**public void eat()**

**{**

**System.out.println("Birds eat less than Others : ");**

**}**

**public void sleep()**

**{**

**System.out.println("Birds sleep less than others : ");**

**}**

**public void fly()**

**{**

**System.out.println("Birds are the only species that fly : ");**

**}**

**}**

**class Test**

**{**

**public static void main(String[] args)**

**{**

**Animal obj1 = new Animal();**

**Bird obj2 = new Bird();**

**obj1.eat();**

**obj1.sleep();**

**obj2.eat();**

**obj2.sleep();**

**obj2.fly();**

**}**

**}**

**Output:**

Text

Description automatically generated

1. **.Create a class Person with a member variable id and name of string type save it in a file called Person.java. Create a class called Employee that will inherit the Person class the other data member of the Employee class are annual salary (double), year employee started working (int), and mobile number. Your class should have the necessary constructors and getter() and setter() methods. Create another class called TestEmployee containing main() method to fully test your class definition.**

**Source code:**

**class Person**

**{**

**private int id;**

**private String name;**

**Person()**

**{**

**this.id = id;**

**this.name = name;**

**}**

**void setId(int id)**

**{**

**this.id = id;**

**}**

**int getId()**

**{**

**return id;**

**}**

**void setName(String name)**

**{**

**this.name = name;**

**}**

**String getName()**

**{**

**return name;**

**}**

**}**

**class Employee extends Person**

**{**

**Employee()**

**{**

**super();**

**}**

**double annualSalary;**

**String dateOfJoining;**

**String mobileNumber;**

**Employee(double annualSalary, String dateOfJoining, String mobileNumber)**

**{**

**this.annualSalary = annualSalary;**

**this.dateOfJoining = dateOfJoining;**

**this.mobileNumber = mobileNumber;**

**}**

**void setAnnualSalary(double annualSalary)**

**{**

**this.annualSalary = annualSalary;**

**}**

**double getAnnualSalary()**

**{**

**return annualSalary;**

**}**

**void setDateOfJoining(String dateOfJoining)**

**{**

**this.dateOfJoining = dateOfJoining;**

**}**

**String getDateOfJoining()**

**{**

**return dateOfJoining;**

**}**

**void setMobileNumber(String mobileNumber)**

**{**

**this.mobileNumber = mobileNumber;**

**}**

**String getMobileNumber()**

**{**

**return mobileNumber;**

**}**

**}**

**class TestEmployee**

**{**

**public static void main(String[] args)**

**{**

**Person ob1 = new Person();**

**Employee ob2 = new Employee();**

**ob1.setId(110);**

**System.out.println(ob1.getId());**

**ob1.setName("Yogesh");**

**System.out.println(ob1.getName());**

**ob2.setAnnualSalary(12000.0);**

**System.out.println(ob2.getAnnualSalary());**

**ob2.setDateOfJoining("20-03-2023");**

**System.out.println(ob2.getDateOfJoining());**

**ob2.setMobileNumber("9295684562");**

**System.out.println(ob2.getMobileNumber());**

**}**

**}**

**Output:**

