Lab Exercise No:1

Exercise Objective(s): The concept of inheritance

Exercise: Create a class called Vehicle. Create subclasses like Truck, Bus, Car etc. Add common methods

in the base class and specific methods in the corresponding class. Create a class called Road

and create objects for the Truck, Car, Bus etc and display the appropriate message.

package assignment;

class Vehicle {

public void start() {

System.***out***.println("Vehicle is starting.");

}

public void stop() {

System.***out***.println("Vehicle is stopping.");

}

}

class Truck extends Vehicle {

public void Truckvehicle() {

System.***out***.println("This is truck.");

}

}

class Bus extends Vehicle {

public void BusVehicle() {

System.***out***.println("This is bus.");

}

}

class Car extends Vehicle {

public void CarVehicle() {

System.***out***.println("This is car.");

}

}

class Road {

public static void main(String[] args) {

Truck truck = new Truck();

Bus bus = new Bus();

Car car = new Car();

truck.start();

truck.Truckvehicle();

truck.stop();

bus.start();

bus.BusVehicle();

bus.stop();

car.start();

car.CarVehicle();

car.stop();

}

}

Lab Exercise No:2

Write a Java program to Implement single inheritance

package assignment;

class Wishes{

public void hello() {

System.***out***.println("Hello");

}}

class Greetings extends Wishes{

public void message() {

System.***out***.println("Good morning everyone");

}

}

class Single{

public static void main(String[]args) {

Greetings g=new Greetings();

g.hello();

g.message();

}

}

Lab Exercise No:3

Write a Java program to based on the multilevel inheritance in Java

package assignment;

class Cars{

public void Name() {

System.***out***.println("This is BMW");

}

}

class Features extends Cars{

public void speed() {

System.***out***.println("It runs at 100kmph");

}

}

class Color extends Features{

public void Red() {

System.***out***.println("It is red in colour");

}

}

public class multilevel {

public static void main(String[] args) {

Color c=new Color();

c.Red();

c.speed();

c.Name();

}

}

Lab Exercise No:4

Create a class named 'Member' having the following members: Data members 1 - Name 2 - Age 3 - Phone number 4 - Address 5 - Salary It also has a method named 'printSalary' which prints the salary of the members. Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee' and 'Manager' classes have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee and a manager by making an object of both of these classes and print the same.

package assignment;

class Member1 {

String name;

int age;

String phoneNumber;

String address;

double salary;

public void printSalary() {

System.***out***.println("Salary: " + salary);

}

}

class Employee extends Member1 {

String specialization;

public void displayDetails() {

System.***out***.println("Name: " + name);

System.***out***.println("Age: " + age);

System.***out***.println("Phone Number: " + phoneNumber);

System.***out***.println("Address: " + address);

System.***out***.println("Specialization: " + specialization);

printSalary();

}

}

class Manager extends Member1 {

String department;

public void displayDetails() {

System.***out***.println("Name: " + name);

System.***out***.println("Age: " + age);

System.***out***.println("Phone Number: " + phoneNumber);

System.***out***.println("Address: " + address);

System.***out***.println("Department: " + department);

printSalary();

}

}

public class Member {

public static void main(String[] args) {

Employee employee = new Employee();

employee.name = "ABC";

employee.age = 30;

employee.phoneNumber = "9675325681";

employee.address = "123 Church Street";

employee.salary = 50000;

employee.specialization = "Software Engineering";

Manager manager = new Manager();

manager.name = "DEF";

manager.age = 45;

manager.phoneNumber = "46271887921";

manager.address = "456 Avenue Road";

manager.salary = 80000;

manager.department = "HR";

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

employee.displayDetails();

System.***out***.println("\nManager Details:");

manager.displayDetails();

}

}