**Lab Sheet 1.1: Create a java program using Single Inheritance.**

class Animal {

void eat() {

System.out.println("The animal eats food.");

}

}

// Subclass inheriting from Animal

class Dog extends Animal {

void bark() {

System.out.println("The dog barks.");

}

}

public class Main {

public static void main(String[] args) {

// Create an instance of the Dog class

Dog myDog = new Dog();

// Call methods from both the superclass and subclass

myDog.eat(); // Inherited from Animal

myDog.bark(); // Defined in Dog

}

}

**Lab Sheet 1.2: Create a java program using Multilevel Inheritance.**

// The base class

class Animal {

void eat() {

System.out.println("Animal is eating");

}

}

// Subclass 1: Mammal, inherits from Animal

class Mammal extends Animal {

void run() {

System.out.println("Mammal is running");

}

}

// Subclass 2: Dog, inherits from Mammal

class Dog extends Mammal {

void bark() {

System.out.println("Dog is barking");

}

}

public class Main {

public static void main(String[] args) {

// Create an instance of Dog

Dog myDog = new Dog();

// Call methods from each class in the hierarchy

myDog.eat(); // Inherited from Animal

myDog.run(); // Inherited from Mammal

myDog.bark(); // Defined in Dog

}