** EXPERIMENT NUMBER – 1.3**

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**Branch: CSE Section/Group: 48 A**

**Semester: 3rd Date of Performance: 18 Sep. 21**

AIM OF THE EXPERIMENT –

Program to learn different types of inheritance in java.

PROGRAM CODE WITH OUTPUT:

(1). Single Inheritance

CODE:

class Animal {

void eat() {

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

}

}

class Dog extends Animal {

void bark() {

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

}

}

class TestInheritance {

public static void main(String args[]) {

Dog d = new Dog();

d.bark();

d.eat();

}

}

OUTPUT:



**(2). Multilevel Inheritance:**

CODE:

class Animal {

void eat() {

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

}

}

class Dog extends Animal {

void bark() {

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

}

}

class BabyDog extends Dog {

void weep() {

System.out.println("weeping...");

}

}

class TestInheritance2 {

public static void main(String args[]) {

BabyDog d = new BabyDog();

d.weep();

d.bark();

d.eat();

}

}

OUTPUT:



(3). Hierarchical Inheritance:

CODE:

class one {

public void print\_geek() {

System.out.println("Geeks");

}

}

class two extends one {

public void print\_for() {

System.out.println("for");

}

}

class three extends one {

/\* ............ \*/

}

// Derived class

public class Main {

public static void main(String[] args) {

three g = new three();

g.print\_geek();

two t = new two();

t.print\_for();

g.print\_geek();

}

}

OUTPUT:



**(4). Multiple Inheritance (using Interface) :**

**CODE:**

interface one {

public void print\_geek();

}

interface two {

public void print\_for();

}

interface three extends one, two {

public void print\_geek();

}

class child implements three {

@Override

public void print\_geek() {

System.out.println("Geeks");

}

public void print\_for() {

System.out.println("for");

}

}

// Derived class

public class Main {

public static void main(String[] args) {

child c = new child();

c.print\_geek();

c.print\_for();

c.print\_geek();

}

}

OUTPUT:



LEARNING OUTCOMES

|  |
| --- |
| * It will provide the modest experience that allows students to develop and improve their experimental skills and develop ability to analyzedata. |
| * Ability to demonstrate the practical skill on measurements and instrumentation techniques of some Physics experiments. Students will develop the ability to use appropriate physical concepts to obtain quantitative solutions to problems inphysics. |
| * Students will demonstrate basic experimental skills by setting up laboratory equipment safely and efficiently, plan and carry out experimental procedures, and report verbally and in written language the results of theexperiment. |
| * Students will develop skills by the practice of setting up and conducting an experimentwithdueregardstominimizing   measurement error. |

EVALUATION COLUMN (To be filled by concerned faculty only)

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Parameters** | **Maximum Marks** | **Marks Obtained** |
| 1. | Worksheet completion including writing learning objectives/Outcomes. (To be submitted at the end of the day) | 10 |  |
| 2. | Post Lab Quiz Result. | 5 |  |
| 3. | Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions. | 5 |  |
| 4. | Total Marks | 20 |  |
| 5. | Teacher’s Signature (with date) |  | |