

Don Bosco Institute of Technology, Kurla(W)
Department of Electronics and Tele-Communication Engineering
ECL304 - Skill Lab: C++ and Java Programming
Sem III
2021-22

Lab Number:	8
Student Name:	Pratham Amare
Roll No :	23

Title:

1. To perform Multilevel Inheritance in JAVA. Create a Person class representing name, age and address. Inherit person class to employee class with emp ID and salary factor. Inherit the Employee class to programmer class with technical skills and hike attributes. Implement valid methods to input the details from the user in the main method and display for 3 programmers.
2. To perform Hierarchical Inheritance in JAVA. Create an Employee class with attributes EmpID and EmpSalary. Also create necessary methods/constructors to accept these values from the user. Create classes permanentEmployee and TemporaryEmployee which will be derived classes of Employee. Mention hike attribute in these derived classes and calculate the total salary using generate_salary() method for respective types of employees. Objects of the derived classes should be created and salaries for the permanent and temporary employees should be calculated and displayed on the screen.

Learning Objective:

- Students will be able to perform multilevel inheritance using JAVA.
- Students will be able to perform hierarchical inheritance using JAVA

Learning Outcome:

- To understand how to use the private members using friend function and friend class.

Course Outcome:

ECL304.2	Comprehend building blocks of OOPs language, inheritance, package and interfaces.
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Theory:

- Explain in details about various inheritance types supported in JAVA

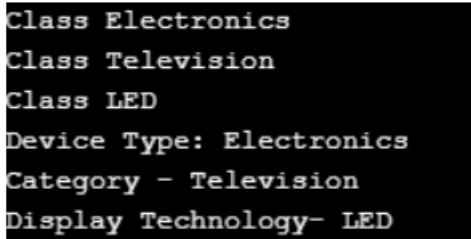
Algorithm :	
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Faculty: Ms. Deepali Kayande

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Program:	<pre>class Electronics { public Electronics(){ System.out.println("Class Electronics"); } public void deviceType() { System.out.println("Device Type: Electronics"); } } class Television extends Electronics { public Television() { System.out.println("Class Television"); } public void category() { System.out.println("Category - Television"); } } class LED extends Television { public LED() { System.out.println("Class LED"); } public void display_tech() { System.out.println("Display Technology- LED"); } } public class Tester { public static void main(String[]</pre>
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	<pre>arguments) { LED led = new LED(); led.deviceType(); led.category(); led.display_tech(); } }</pre>
Input given:	
Output Screenshot:	 <pre>Class Electronics Class Television Class LED Device Type: Electronics Category - Television Display Technology- LED</pre>