**Name: AKHILA ANAND**

**Roll No:3**

**Batch:MCA B**

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**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment:.11**

**Aim**

Create a class ‘Employee’ with data members Empid, Name, Salary, Address and constructors to initialize the data members. Create another class ‘Teacher’ that inherit the properties of class employee and contain its own data members department, Subjects taught and constructors to initialize these data members and also include display function to display all the data members. Use array of objects to display details of N teachers.

**Procedure**

import java.util.Scanner;

class Employee {

int empid;

double salary;

String name, address;

Employee(int empid, String name, double salary, String address) {

this.empid = empid;

this.name = name;

this.salary = salary;

this.address = address;

}

}

class Teacher extends Employee {

String department, subjects;

Teacher(int empid, String name, double salary, String address, String department, String subjects) {

super(empid, name, salary, address);

this.department = department;

this.subjects = subjects;

}

void displayDetails(String emp) {

System.out.println("The ID of the " + emp + " is: " + this.empid);

System.out.println("The name of the " + emp + " is: " + this.name);

System.out.println("The salary of the " + emp + " is: " + this.salary);

System.out.println("The address of the " + emp + " is: " + this.address);

System.out.println("The department of the " + emp + " is: " + this.department);

System.out.println("The subjects of the " + emp + " is: " + this.subjects);

}

}

class arrayInheritance {

public static void main(String[] args) {

int empnum;

Scanner sc = new Scanner(System.in);

System.out.print("Please enter the number of employees to entered : ");

empnum = sc.nextInt();

System.out.println("\n");

Teacher[] teachers\_arr = new Teacher[empnum];

for (int i = 0; i < empnum; i++) {

int empid;

double salary;

String name, address;

String department, subjects;

System.out.print("Enter the empid of the " + (i + 1) + " teacher : ");

empid = sc.nextInt();

System.out.print("Enter the name of the " + (i + 1) + " teacher : ");

name = sc.next();

System.out.print("Enter the salary of the " + (i + 1) + " teacher : ");

salary = sc.nextDouble();

System.out.print("Enter the address of the " + (i + 1) + " teacher : ");

address = sc.next();

System.out.print("Enter the department of the " + (i + 1) + " teacher : ");

department = sc.next();

System.out.print("Enter the subjects of the " + (i + 1) + " teacher : ");

subjects = sc.next();

teachers\_arr[i] = new Teacher(empid,name, salary, address, department, subjects);

System.out.println("\n");

}

for (int i = 0; i < teachers\_arr.length; i++) {

String txt = (i == 0) ? (i + 1) + "st"

: ((i == 1) ? (i + 1) + "nd" : ((i == 2) ? (i + 1) + "rd" : (i + 1) + "th"));

teachers\_arr[i].displayDetails(txt);

System.out.println("\n");

}

sc.close();

}

}

**Output Screenshot**

