OBJECT ORIENTED PROGRAMMING LAB

Experiment No.: 11

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Batch: B

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Aim

Area Create a class 'Person' with data members Name, Gender, Address, Age and a constructor to initialize the data members and another class 'Employee' that inherits the properties of class Person and also contains its own data members like Empid, Company_name, Qualification, Salary and its own constructor. Create another class 'Teacher' that inherits the properties of class Employee and contains its own data members like Subject, Department, Teacherid and also contain constructors and methods to display the data members. Use array of objects to display details of N teachers.

Procedure

```
import java.util.*;

class Person{
        String Name, Gender, Address;
        int Age;
        Person(String name, String gender, String address, int age){
                Name = name;
                Gender = gender;
                Address = address;
                Age = age;
        }
}

class Employee extends Person{
        int empid, salary;
        String company_name, qualification;
        Employee(String Name, String Gender, String Address, int Age, int EmpId,
String CompanyName, String Qualify, int Salary){
                super(Name, Gender, Address, Age);
                empid = EmpId;
                company_name = CompanyName;
                qualification = Qualify;
                salary = Salary;
        }
}

class Teacher extends Employee{
        int tid;
        String dept, sub;
        Teacher(String Name, String Gender, String Address, int Age, int empid,
String company_name, String qualification, int salary, int teacherid, String
department, String subject){
```

```java
                super(Name, Gender, Address, Age, empid, company_name,
qualification, salary);
                tid = teacherid;
                dept = department;
                sub = subject;
        }

        void Display(int i){
                System.out.println("DETAILS ("+(i+1)+"):-\n-------------\n");
                System.out.println("EMP-ID : "+empid);
                System.out.println("TEACHER-ID : "+tid);
                System.out.println("NAME : "+Name);
                System.out.println("ADDRESS : "+Address);
                System.out.println("GENDER : "+Gender);
                System.out.println("AGE : "+Age);
                System.out.println("COMANY NAME : "+company_name);
                System.out.println("QUALIFICATION : "+qualification);
                System.out.println("DEPARTMENT : "+dept);
                System.out.println("SUBJECT : "+sub);
                System.out.println("SALARY : "+salary);
        }
}

public class PersonEmployee{
        public static void main(String args[]){
                int n, empid, age, teacherid, salary;
                String name, address, gender, companyname, qualify, dept, sub;
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter the Limit : ");
                n = sc.nextInt();
                Teacher[] arr = new Teacher[n];
                for(int i=0; i<n; i++){
                        System.out.println("Enter the ["+(i+1)+"] Employee ID : ");
                        empid = sc.nextInt();

                        System.out.println("Enter the Teacher ID : ");
                        teacherid = sc.nextInt();

                        System.out.println("Enter the Name : ");
                        name = sc.next();

                        System.out.println("Enter the Address : ");
                        address = sc.next();

                        System.out.println("Enter the Gender : ");
                        gender = sc.next();

                        System.out.println("Enter the Age : ");
                        age = sc.nextInt();

                        System.out.println("Enter the Company Name : ");
                        companyname = sc.next();

                        System.out.println("Enter the Qualification : ");
                        qualify = sc.next();

                        System.out.println("Enter the Deaprtment : ");
                        dept = sc.next();

                        System.out.println("Enter the Subject : ");
                        sub = sc.next();
```

```
                        System.out.println("Enter the Salary : ");
                        salary = sc.nextInt();

                        arr[i] = new Teacher(name, gender, address, age, empid,
companyname, qualify, salary, teacherid, dept, sub);
                }
            for(int i=0; i<n; i++){
                        arr[i].Display(i);
                }
        }
}
```

Output screenshot

```
C:\Users\Student\Documents>javac PersonEmployee.java

C:\Users\Student\Documents>java PersonEmployee
Enter the Limit :
2
Enter the [1] Employee ID :
100
Enter the Teacher ID :
50
Enter the Name :
Anjali
Enter the Address :
kottayam
Enter the Gender :
female
Enter the Age :
30
Enter the Company Name :
tata
Enter the Qualification :
mca
Enter the Deaprtment :
software
Enter the Subject :
python
Enter the Salary :
50000
Enter the [2] Employee ID :
101
Enter the Teacher ID :
30
Enter the Name :
Anil
Enter the Address :
Palakkad
Enter the Gender :
male
Enter the Age :
40
Enter the Company Name :
infosysic
Enter the Qualification :
mteach
```

```
Enter the Deaprtment :
network
Enter the Subject :
java
Enter the Salary :
60000
DETAILS (1):-
--------------

EMP-ID : 100
TEACHER-ID : 50
NAME : Anjali
ADDRESS : kottayam
GENDER : female
AGE : 30
COMANY NAME : tata
QUALIFICATION : mca
DEPARTMENT : software
SUBJECT : python
SALARY : 50000
DETAILS (2):-
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EMP-ID : 101
TEACHER-ID : 30
NAME : Anil
ADDRESS : Palakkad
GENDER : male
AGE : 40
COMANY NAME : infosysic
QUALIFICATION : mteach
DEPARTMENT : network
SUBJECT : java
SALARY : 60000

C:\Users\Student\Documents>
```