OBJECT ORIENTED PROGRAMMING LAB

Experiment No: 12

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Roll No: 17

Batch: S2 RMCA B

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<u>Aim</u>

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.Scanner;
class Person{
 String Name;
 String Gender;
 String Address;
 int Age;
 Person(String Nm, String G, String Add, int Ag){
 Name=Nm:
 Gender=G;
 Address=Add;
 Age=Ag;
  }
 class Employee extends Person{
  int Empid;
  String Company_name;
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```

```
String Qualification;
  int Salary;
Employee(String Nm, String G, String Add, int Ag, int Id, String Cname, String Quali, int
Sal){
   super(Nm,G,Add,Ag);
   Empid=Id;
   Company_name=Cname;
   Qualification=Quali;
   Salary=Sal;
                    }
 }
 class Teacher extends Employee{
   String Subject;
   String Department;
   int Teacherid;
Teacher(String Nm, String G, String Add, int Ag, int Id, String Cname, String Quali, int
Sal, String Sub, String Dep, int Tid) {
   super(Nm,G,Add,Ag,Id,Cname,Quali,Sal);\\
   Subject=Sub;
   Department=Dep;
   Teacherid=Tid;
 void display(){
 System.out.println("Person Name : "+Name);
 System.out.println("Gender: "+Gender);
 System.out.println("Address: "+Address);
 System.out.println("Age: "+Age);
 System.out.println("Employee id: "+Empid);
 System.out.println("Company Name: "+Company_name);
 System.out.println("Qualification: "+Qualification);
```

```
System.out.println("Salary: "+Salary);
System.out.println("Subject: "+Subject);
System.out.println("Department: "+Department);
System.out.println("Teacher id: "+Teacherid);
}
class Pers{
 public static void main(String[] args) {
 System.out.println("\nEnter the No. of persons");
 Scanner sc1 = new Scanner(System.in);
 int num = sc1.nextInt();
 Teacher arr[]=new Teacher[num];
 for(int i = 0;i < num; i++)
 {
   Scanner sc =new Scanner(System.in);
   System.out.println("******Enter Details******");
   System.out.println("\nEnter Person Name: ");
   String Name=sc.next();
   System.out.println("\nEnter Gender: ");
   String Gender=sc.next();
   System.out.println("\nEnter Address: ");
   String Address=sc.next();
   System.out.println("\nEnter Age: ");
   int Age=sc.nextInt();
   System.out.println("\nEnter Employee id: ");
   int Empid=sc.nextInt();
   System.out.println("\nEnter Company Name: ");
   String Company_name=sc.next();
   System.out.println("\nEnter Qualification: ");
```

```
String Qualification=sc.next();
    System.out.println("\nEnter Salary: ");
    int Salary=sc.nextInt();
    System.out.println("\nEnter Subject: ");
    String Subject=sc.next();
    System.out.println("\nEnter Department: ");
    String Department=sc.next();
    System.out.println("\nEnter Teacher id: ");
    int Teacherid=sc.nextInt();
     arr[i]=new
Teacher(Name, Gender, Address, Age, Empid, Company_name, Qualification, Salary, Subject
,Department,Teacherid);
  }
 System.out.println("\n^{********Informations} of all the employee's "********");
  for(int i=0;i< num;i++){
    int j=i+1;
    System.out.println("\n"+j+").");
    arr[i].display();
}
sc1.close();
}
```

Output:

```
C:\Users\Student\Documents>java Pers
Enter the No. of persons
******Enter Details*****
Enter Person Name:
Alex
Enter Gender:
Male
Enter Address:
Kottayam
Enter Age:
34
Enter Employee id:
100
Enter Company Name:
TCS
Enter Qualification:
BCA
Enter Salary:
25000
Enter Subject:
Java
Enter Department:
MCA
Enter Teacher id:
102
```

```
******Enter Details*****
Enter Person Name:
Zera
Enter Gender:
Female
Enter Address:
Mumbai
Enter Age:
28
Enter Employee id:
Enter Company Name:
Wipro
Enter Qualification:
MCA
Enter Salary:
500000
Enter Subject:
Python
Enter Department:
MCA
Enter Teacher id:
205
```

```
*******Informations of all the employee's********
1).
Person Name : Alex
Gender: Male
Address: Kottayam
Age: 34
Employee id: 100
Company Name: TCS
Qualification: BCA
Salary: 25000
Subject: Java
Department: MCA
Teacher id: 102
2).
Person Name : Zera
Gender: Female
Address: Mumbai
Age: 28
Employee id: 200
Company Name: Wipro
Qualification: MCA
Salary: 500000
Subject: Python
Department: MCA
Teacher id: 205
```