

2 A) Design a superclass called Staff with details as StaffId, Name, Phone, Salary. Extend this class by writing three subclasses namely Teaching (domain, publications), Technical (skills), and Contract (period). Write a Java program to read and display at least 3 staff objects of all three categories.

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2A) import java.util.Scanner;
class Staff
{
    int staffId;
    String name;
    long phoneNo;
    int salary;

    /* Scanner class to read from console */
    Scanner in = new Scanner(System.in);

    /* Method to read the Staff data */
    void readData()
    {
        System.out.println("Enter the name of the staff");
        name = in.nextLine();

        System.out.println("Enter the staffId");
        staffId = in.nextInt();

        System.out.println("Enter the phoneNo");
        phoneNo = in.nextLong();

        System.out.println("Enter the salary");
        salary = in.nextInt();
    }

    /* Method to display the Staff data */
    void displayData()
    {
        System.out.println("-----");
        System.out.println("StaffId: " + " " + staffId);
        System.out.println("Name: " + " " + name);
        System.out.println("PhoneNo: " + " " + phoneNo);
        System.out.println("Salary: " + " " + salary);
    }
}

```

```
class StaffTeaching extends Staff
{
    String domain;
    int publications;

    /* Method overriding for readData() method */
    void readData()
    {
        /* super keyword used to invoke the super class method */
        super.readData();
        in.nextLine();
        System.out.println("Enter the domain");
        domain = in.nextLine();

        System.out.println("Enter the no of publications");
        publications = in.nextInt();
    }

    /* Method overriding for displayData() method */
    void displayData()
    {
        super.displayData();
        System.out.println("Domain: " + " " + domain);
        System.out.println("No of publications" + " " + publications);
        System.out.println("-----");
    }
}

class StaffTechnical extends Staff
{
    String skills;
    void readData()
    {
        super.readData();
        in.nextLine();
        System.out.println("Enter the skills");
        skills = in.nextLine();
    }

    void displayData()
    {
        super.displayData();
        System.out.println("Skills are :" + " " + skills);
    }
}
```

```
        System.out.println("-----");
    }
}

class StaffContract extends Staff
{
    int contPeriod;

    void readData()
    {
        super.readData();
        System.out.println("Enter the contract period in months");
        contPeriod = in.nextInt();
    }

    void displayData()
    {
        super.displayData();
        System.out.println("Contract Period is : " + " " + contPeriod + " months");
        System.out.println("-----");
    }
}

public class StaffDemo
{
    public static void main(String [] args)
    {
        StaffTeaching stt[] = new StaffTeaching[3];
        StaffTechnical stec[] = new StaffTechnical[3];
        StaffContract stc[] = new StaffContract[3];

        System.out.println("Read Teaching Staff Details");
        for(int i=0;i<3;i++)
        {
            stt[i] = new StaffTeaching();
            System.out.println("Enter the Teaching Staff " + (i+1)+ " details");
            stt[i].readData();
        }

        System.out.println("Read Technical Staff Details");
        for(int i=0;i<3;i++)
        {
            stec[i] = new StaffTechnical();
            System.out.println("Enter the Technical Staff " + (i+1)+ " details");
            stec[i].readData();
        }
    }
}
```

```
}

System.out.println("Read Contract Staff Details");
for(int i=0;i<3;i++)
{
    stc[i] = new StaffContract();
    System.out.println("Enter the Contract Staff " + (i+1)+ " details");
    stc[i].readData();
}

for(int i=0;i<3;i++)
{
    System.out.println("Details of Teaching Staff "+(i+1) + " is:");
    stt[i].displayData();
}

for(int i=0;i<3;i++)
{
    System.out.println("Details of Technical Staff " + " " + (i+1) + " is:");
    stec[i].displayData();
}

for(int i=0;i<3;i++)
{
    System.out.println("Details of Contract Staff " + " " + (i+1) + " is:");
    stc[i].displayData();
}
}
}
```