PROGRAM 2

2.A)

Design a superclass called Staff with details as Staff ID, 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.

```
package labprograms;

import java.util.*;

public class p2a {

	public static void main(String[] args) {

		Teaching teach=new Teaching();

		Technical tech=new Technical();

		Contract cont=new Contract();

		System.out.println("Input teaching staff details : ");

		teach.read();

		System.out.println("\n\nInput technical staff details : ");

		tech.read();

		System.out.println("\n\nInput contract staff details : ");

		cont.read();

		System.out.println("\nHere is the teaching staff details : ");

		teach.display();

		System.out.println("\nHere is the technical staff details : ");

		tech.display();

		System.out.println("\nHere is the Contract staff details : ");

		cont.display();

	}

}

class Staff

{

	String name,phone;

	int sid,sal;

	Scanner sc=new Scanner(System.in);

	void read()

	{
```

```
                System.out.print("Staff ID : ");
                sid=sc.nextInt();
                System.out.print("Name : ");
                name=sc.next();
                System.out.print("Phone Number : ");
                phone=sc.next();
                System.out.print("Salary : ");
                sal=sc.nextInt();
                sc.nextLine();
        }
        void display()
        {
                System.out.println("Staff ID : "+sid);
                System.out.println("Name : "+name);
                System.out.println("Phone Number : "+phone);
                System.out.println("Salary : "+sal);
        }
}
class Teaching extends Staff
{
        String domain;
        int publication;
        void read()
        {
                super.read();
                System.out.print("Domain : ");
                domain=sc.nextLine();
                System.out.print("Publications : ");
                publication=sc.nextInt();
        }
        void display()
        {
                super.display();
                System.out.println("Domain : "+domain);
```

```
                System.out.println("Publications : "+publication);
        }
}
class Technical extends Staff
{
        String[] skills;
        void read()
        {
                super.read();
                System.out.print("Skills : ");
                skills=sc.nextLine().split(",");
        }
        void display()
        {
                super.display();
                System.out.print("Skills : ");
                for(int i=0;i<skills.length;i++)
                        System.out.print(skills[i]+",");
                System.out.println();
        }
}
class Contract extends Staff {
        int period;
        void read()
        {
                super.read();
                System.out.print("Contract Period : ");
                period=sc.nextInt();
        }
        void display() {
                super.display();
                System.out.println("Contract Period : "+period);
        }
}
```

2.B)

Write a Java class called Customer to store their name and date_of_birth. The date_of_birth format should be dd/mm/yyyy. Write methods to read customer data as <name, dd/mm/yyyy> and display as <name, dd, mm, yyyy> using StringTokenizer class considering the delimiter character as "/".

```
package labprograms;

import java.util.*;

public class p2b {

	public static void main(String[] args) {

		Scanner sc=new Scanner(System.in);

		Customer cust=new Customer();

		System.out.println("Sample Input : XYZ,12/12/2010");

		System.out.println("++++++++++++++++++++++++++++++\nEnter  customer data
(name,dd/mm/yyyy) : ");

		String data=sc.next();

		cust.readdata(data);

		System.out.println("Customer Data is : ");

		cust.displaydata(cust);

		sc.close();

	}

}

class Customer   {

	String name,dob;

	public void readdata(String custdata)

	{

		String[] dataarray=custdata.split(",");

		this.name=dataarray[0];

		this.dob=dataarray[1];

	}

	public void displaydata(Customer cust)

	{

		StringTokenizer str=new StringTokenizer(cust.dob,"/");

		System.out.println(this.name+","+str.nextToken()+","+str.nextToken()+","+str.nextToken());

	}

}
```