

Week 9 - extra program -

1. File: members

```
package Staff;  
public class members  
{  
    public int id;  
    public String name;  
}
```

File: Staff

```
package Staff;  
import java.util.Scanner;  
public class Staff extends members  
{  
    String designation;  
    public void accept()  
    {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter the ID, name and  
        designation of the staff");  
        id = sc.nextInt();  
        name = sc.next();  
        designation = sc.next();  
    }  
    public void display()  
    {  
        System.out.println("Details are:");  
        System.out.println("ID: " + id);  
        System.out.println("Name: " + name);  
        System.out.println("Designation: " + designation);  
    }  
}
```

File: stu

```
package Student;
import Staff.*;
import java.util.Scanner;
public class stu extends Staff-members
{
    int sem;
    public void accept()
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the ID, name, and semester of the student");
        id = sc.nextInt();
        name = sc.next();
        sem = sc.nextInt();
    }
    public void display()
    {
        System.out.println("Details are:");
        System.out.println("ID: " + id);
        System.out.println("Name: " + name);
        System.out.println("Semester: " + sem);
    }
}
```

File: university

```
import Student.*;
import Staff.*;
import java.util.Scanner;
class university
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        int n_st, n_sf, i;
```

```
System.out.println("Enter the number of students  
and the number of staff");
```

```
n_st = sc.nextInt();
```

```
n_sf = sc.nextInt();
```

```
Staff staff sf[] = new Staff[n_sf];
```

```
Student stu st[] = new Student[n_st];
```

```
for (i=0; i<n_st; i++)
```

```
{
```

```
    st[i] = new Student();
```

```
    System.out.println("--- Student " + (i+1) + " ---");
```

```
    st[i].accept();
```

```
}
```

```
for (i=0; i<n_sf; i++)
```

```
{
```

```
    sf[i] = new Staff();
```

```
    System.out.println("--- Staff " + (i+1) + " ---");
```

```
    sf[i].accept();
```

```
}
```

```
System.out.println();
```

```
System.out.println("Detail:");
```

```
for (i=0; i<n_st; i++)
```

```
{
```

```
    System.out.println("--- Student " + (i+1) + " ---");
```

```
    st[i].display();
```

```
}
```

```
System.out.println();
```

```
for (i=0; i<n_sf; i++)
```

```
{
```

```
    System.out.println("--- Staff " + (i+1) + " ---");
```

```
    sf[i].display();
```

```
}
```

```
}
```

FILE : members.java

```
package Staff;

public class members
{
    public int id;
    public String name;
}
```

FILE: staff.java

```
package Staff;

import java.util.Scanner;

public class staff extends members
{
    String designation;

    public void accept()
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the ID,name and designation of the staff");

        id=sc.nextInt();

        name=sc.next();

        designation=sc.next();
    }

    public void display()
    {
        System.out.println("Details are:");

        System.out.println("ID: "+id);

        System.out.println("Name: "+name);

        System.out.println("Designation: "+designation);
    }
}
```

FILE: stu.java

```

package Student;

import Staff.*;

import java.util.Scanner;

public class stu extends Staff.members
{
    int sem;

    public void accept()
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the ID,name and semester of the student");

        id=sc.nextInt();

        name=sc.next();

        sem=sc.nextInt();

    }

    public void display()
    {
        System.out.println("Details are:");

        System.out.println("ID: "+id);

        System.out.println("Name: "+name);

        System.out.println("Semester: "+sem);

    }

}

```

FILE: university.java

```

import Student.*;

import Staff.*;

import java.util.Scanner;

class university
{
    public static void main(String args[])
    {

```

```

Scanner sc=new Scanner(System.in);

int n_st,n_sf,i;

System.out.println("Enter the number of students and the number of staffs");

n_st=sc.nextInt();
n_sf=sc.nextInt();

Staff.staff sf[]=new Staff.staff[n_sf];
Student.stu st[]=new Student.stu[n_st];

for(i=0;i<n_st;i++)
{
    st[i]=new Student.stu();

    System.out.println("---Student "+(i+1)+" ---");

    st[i].accept();
}

for(i=0;i<n_sf;i++)
{
    sf[i]=new Staff.staff();

    System.out.println("---Staff "+(i+1)+" ---");

    sf[i].accept();
}

System.out.println();

System.out.println("Details:");

for(i=0;i<n_st;i++)
{
    System.out.println("---Student "+(i+1)+" ---");

    st[i].display();
}

System.out.println();

for(i=0;i<n_sf;i++)
{
    System.out.println("---Staff "+(i+1)+" ---");

    sf[i].display();
}

```

```
    }  
}  
}
```

```
C:\Users\Adithi\Desktop\java_prgs\package2>java university  
Enter the number of students and the number of staffs  
1  
1  
---Student 1 ---  
Enter the ID,name and semester of the student  
3432  
Anu  
2  
---Staff 1 ---  
Enter the ID,name and designation of the staff  
8979  
Aditi  
Teacher  
  
Details:  
---Student 1 ---  
Details are:  
ID: 3432  
Name: Anu  
Semester: 2  
  
---Staff 1 ---  
Details are:  
ID: 8979  
Name: Aditi  
Designation: Teacher  
  
C:\Users\Adithi\Desktop\java_prgs\package2>
```