

## Lab program 8

Create a package CIE which has two classes - Student and Internal. Internal has an array that stores the internal marks scored in five courses of the current semester of the student. Create another package SEE which has the class External which is a derived class of Student. This class has an array that stores the SEE marks scored in five courses of the current semester of the student. Import the two packages in a file that declares the final marks of n students in all five courses. Internal is a subclass of Student.

```
package CIE;  
import java.util.*;
```

```
public class Student  
{  
    String USN;  
    String name = new String();  
    int sem;  
    public void setinfo()  
    {  
        System.out.println("Enter USN, name, sem");  
        Scanner ss = new Scanner(System.in);  
        USN = ss.next();  
        name = ss.next();  
        sem = ss.nextInt();  
    }  
    public void display()  
    {  
        System.out.println("USN:" + USN);  
        System.out.println("NAME:" + name);  
    }  
}
```

```
System.out.println ("SEM:" + sem);
}
```

```
}
```

```
package CIE;
```

```
import java.util.*;
```

```
public class internal extends student
{
```

```
    public double arrcic[] = new double[5];
```

```
    public void setd()
```

```
    {
```

```
        System.out.println ("Enter marks for 5  
subjects :");
```

```
        Scanner ss = new Scanner (System.in);
```

```
        for (int i = 0; i < 5; i++)
```

```
        {
```

```
            arrcic[i] = ss.nextDouble();
```

```
        }
```

```
    }
```

```
    public void disp()
```

```
    {
```

```
        System.out.println ("CIE MARKS OF 5 SUBJ
```

```
        for (int i = 0; i < 5; i++)
```

```
        {
```

```
            System.out.println (arrcic[i]);
```

```
        }
```

```
    }
```

```
}
```

```
package SEE;
```

```
public class external extends internal
{
```



```
public double arrsee[] = new double[5];  
double finalm[] = new double[5];  
public void set()  
{
```

```
    System.out.println("Enter marks for  
    5 subjects for SEE:");
```

```
    Scanner ss = new Scanner(System.in);
```

```
    for (int i = 0; i < 5; i++)
```

```
    {
```

```
        arrsee[i] = ss.nextDouble();
```

```
    }
```

```
public void disp2()  
{
```

```
    System.out.println("SEE marks of 5 sub:");
```

```
    for (int i = 0; i < 5; i++)
```

```
    {
```

```
        System.out.println(arrsee[i]);
```

```
    }
```

```
}
```

```
public void finalmarks()  
{
```

```
    for (int i = 0; i < 5; i++)
```

```
    {
```

```
        finalm[i] = arrsee[i] + arrcie[i];
```

```
    }
```

```
}
```

```
public void display()  
{
```

```
    System.out.println("Final marks is:");
```

```
    for (int i = 0; i < 5; i++)
```

```
    {
```

```
        System.out.println(finalm[i]);
```

```
    }
```

```

    }
}

class Main
{
    public static void main(String xx[])
    {
        System.out.println("Enter no of students:");
        Scanner ss = new Scanner(System.in);
        int n;
        double fin[] = new double[5];
        n = ss.nextInt();
        external e[] = new external[n];
        for (int i = 0; i < n; i++)
        {
            e[i] = new external();
            e[i].setinfo();
            e[i].setd();
            e[i].set();
            e[i].finalmarks();
            e[i].displ();
        }
    }
}

```

Output:

Enter no of students:

1

Enter unv, name, sem:

IBM2ICS010

aisha

3.



paperism

Date:

Enter marks for 5 subjects:

45

46

47

43

42

Enter marks for 5 subjects for SEE:

46

47

43

45

41

Final marks:

91.0

93.0

90.0

88.0

83.0

Microsoft Windows [Version 10.0.22621.963]  
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```
C:\Users\Aisha Taffazul\Desktop\packaages>javac student.java

C:\Users\Aisha Taffazul\Desktop\packaages>javac internals.java

C:\Users\Aisha Taffazul\Desktop\packaages>javac external.java

C:\Users\Aisha Taffazul\Desktop\packaages>javac Main.java

C:\Users\Aisha Taffazul\Desktop\packaages>java Main
Enter no of students :
1
Enter usn,name,sem:
1bm21cs010
aisha
3
Enter marks for 5 subjects :
45
46
47
43
42
Enter marks for 5 subjects for SEE :
46
47
43
45
41
FINAL MARKS IS :
91.0
93.0
90.0
88.0
83.0

C:\Users\Aisha Taffazul\Desktop\packaages>
```