

## Lab-6

Create a package CIE which has two classes Student and Internals. The class Personal has members like usn, name, sem. The class 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~~ 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 ~~a~~ n students in all five courses.

```
package CIE;
import java.util. Scanner;
public class Internals extends Studentd
{
    public double ciem[];
    public void display()
    {
        ciem = new double[5];
        Scanner t = new Scanner(System.in);
        System.out.println("CIE marks for 5 subjects:");
        for (inti=0; i<5; i++)
            ciem[i] = t.nextDouble();
    }
}
```

```
package CIE;
import java.util.Scanner;
public class Student
{
```

```
    public String name;
    public String usn;
    public int sem;
    public void display()
    {
```

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

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

```
        name = s.next();
```

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

```
        usn = s.next();
```

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

```
        sem = s.nextInt();
```

```
    }
```

```
}
```

~~package CIE;~~

```
package SEE;
```

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

```
import CIE.*;
```

```
public class Externals extends CIE.Student {
```

```
    public double seem[];
```

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

```
        seem = new double[5];
```

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

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

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

```
            seem[i] = s.nextDouble();
```

```
    }
```

```
}
```



```
import CIE.*;  
import SEE.*;  
import java.util.Scanner;  
public class main  
{
```

```
    public static void main (String args[])  
    {
```

```
        int n;
```

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

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

```
        n = s.nextInt();
```

```
        CIE.Student st[] = new CIE.Student[n];
```

```
        CIE.Internals in[] = new CIE.Internals[n];
```

```
        SEE.Externals e[] = new SEE.Externals[n];
```

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

```
        {
```

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

```
            in[i] = new CIE.Internals();
```

```
            e[i] = new SEE.Externals();
```

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

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

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

```
        System.out.println("Total marks of student  
        "+st[i].name+" in 5 subjects are:");
```

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

```
        {
```

```
            System.out.println(in[i].ciem[j] + (e[i].seem  
                                [j]/2));
```

```
        }
```

```
    }
```

```
}
```

```
}
```