

1BM19CS150

LAB PROGRAM-6

Create a package CIE which has two classes - Student and Internals. The class Personal has members like USN, name, sem. The class Internals has an array that stores ----- . Import the two packages in a file that declares the final marks of n students in all five courses. Solve this program & write the procedure you have used to execute it.

In CIE package, Student.java →

```
package CIE;
public class Student
{
    public String USN;
    public String name;
    public int sem;
    public Student(String USN, String name, int sem)
    {
        this.USN = USN;
        this.name = name;
        this.sem = sem;
    }
}
```

In CIE package, Internals.java →

```
package CIE;
import java.util.Scanner;
public class Internals extends Student
{
    Scanner in = new Scanner(System.in);
    public int[] cie = new int[5];
    public Internals(String USN, String name, int sem)
    {
        super(USN, name, sem);
    }
}
```

```

    public void get-data()
    {
        for (int i=0; i<5; i++)
        {
            System.out.print("Enter CIE marks of the
                               student in Subject " + (i+1) + "(out of 50):");
            cie[i] = in.nextInt();
        }
    }
}

```

In SEE package, External.java →

```

package SEE;
import java.util.Scanner;
public class External extends CIE.Student
{
    public External (String USN, String name, int sem)
    {
        super (USN, name, sem);
    }
    Scanner in = new Scanner (System.in);
    public int [] see = new int [5];
    public void get-data()
    {
        for (int i=0; i<5; i++)
        {
            System.out.print ("Enter SEE marks of the
                               student in Subject " + (i+1) + "(out of 100):");
            see[i] = in.nextInt();
        }
    }
}

```


In default package, final-marks.java →

```
import CIE.*;  
import SEE.*;  
import java.util.Scanner;  
class final-marks
```

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

```
{  
    Scanner in = new Scanner (System.in);  
    System.out.print ("Enter the number of students:");
```

```
    int n = in.nextInt();
```

```
    CIE.Internals obj[] = new CIE.Internals [5];
```

```
    SEE.External obj1[] = new SEE.External [5];
```

```
    int total = 0;
```

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

```
{  
        System.out.println ("\n Enter details of student"  
                               + (i+1) + " :");
```

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

```
        String USN = in.next();
```

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

```
        String name = in.next();
```

```
        System.out.print ("Semester :");
```

```
        int sem = in.nextInt();
```

```
        obj[i] = new CIE.Internals (USN, name, sem);
```

```
        obj[i].get_data();
```

```
        obj1[i] = new SEE.External (USN, name, sem);
```

```
        obj1[i].get_data();
```

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

```
{  
        System.out.println ("\n TOTAL MARKS OF STUDENT"  
                               + (i+1) + " (out of 100) is :");
```

```
for(int j=0; j<5; j++)  
{  
    total = (obj[i].cie[j]) +  
            (obj1[i].see[j])/2;  
    System.out.println("Subject "+(j+1)+" : "+total);  
}  
}  
}
```