

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 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.

Students:

```
package cie;  
import java.util.Scanner;  
public class student  
{  
Scanner sc=new  
Scanner(System.in);  
public String usn,name;  
public int sem;  
public void accept()  
{  
System.out.println("enter the usn  
");  
usn=sc.next();  
System.out.println("enter the  
name ");  
name=sc.next();  
System.out.println("enter the  
sem ");  
sem=sc.nextInt();
```

```
}  
public void display()  
{  
System.out.println("name  
:"+name);  
System.out.println("usn :"+usn);  
System.out.println("sem :"+sem);  
}  
}
```

Internals:

```
package cie;  
import java.util.Scanner;  
public class internals extends  
cie.student  
{  
Scanner sc=new  
Scanner(System.in);  
public int ciem[]=new int[5];  
  
public void accept()  
{  
for(int i=0;i<5;i++)  
{  
System.out.println("enter cie  
marks of subjects "+(i+1));  
ciem[i]=sc.nextInt();  
}  
}  
}
```

Externals:

```
package see;  
import cie.*;  
import java.util.Scanner;  
public class externals extends  
cie.student  
{  
Scanner sc=new  
Scanner(System.in);  
public int seem[]=new int[5];  
public void accept()  
{  
for(int i=0;i<5;i++)  
{  
System.out.println("enter the see  
marks in subject "+(i+1));  
seem[i]=sc.nextInt();  
}  
}  
}
```

Totalmarks:

```
import cie.*;  
import see.*;  
import java.util.Scanner;  
  
class totalmarks  
{
```

```
public static void main(String  
args[])  
{  
int i,j,n;  
Scanner sc=new  
Scanner(System.in);  
int total[]=new int[5];  
System.out.println("enter the  
number of students ");  
n=sc.nextInt();  
student s[]=new student[n];  
internals ci[]=new internals[n];  
externals se[]=new externals[n];  
for(i=0;i<n;i++)  
{  
System.out.println("enter the  
details of student " +(i+1));  
s[i]=new student();  
s[i].accept();  
ci[i]=new internals();  
ci[i].accept();  
se[i]=new externals();  
se[i].accept();  
}  
for(i=0;i<n;i++)  
{  
System.out.println("details of the  
student " +(i+1));  
s[i].display();  
for(j=0;j<5;j++)  
{
```

```
total[j]=ci[i].ciem[j]+se[i].seem[j];  
System.out.println("total marks  
in subject "+(j+1)+" "+total[j]);  
}  
System.out.println();  
}  
}  
}
```

Output:

```
enter the number of students
1
enter the details of student 1
enter the usn
1234
enter the name
varun
enter the sem
3
enter cie marks of subjects 1
10
enter cie marks of subjects 2
10
enter cie marks of subjects 3
10
enter cie marks of subjects 4
10
enter cie marks of subjects 5
10
enter the see marks in subject 1
10
enter the see marks in subject 2
10
enter the see marks in subject 3
10
enter the see marks in subject 4
10
enter the see marks in subject 5
10
details of the student 1
name :varun
usn :1234
sem :3
total marks in subject 1 20
total marks in subject 2 20
total marks in subject 3 20
total marks in subject 4 20
total marks in subject 5 20
```