

Q. Create a package CIE which has two classes - Student and Internal. 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 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 2 packages in a file that decreases the final marks of a student in all five courses.

→ Program:-

```
Package CIE;
```

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

```
Public class Internal extends CIE.Student
```

```
{
```

```
Public int cie1[] = new int[5];
```

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

```
Public void getInput()
```

```
{
```

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

```
{
```

```
System.out.println ("Enter the CIE marks of  
Subject " + (i+1) + " Out of 50");
```

```
{
```

```
cie1[i] = ss.nextInt();
```

```
}
```

```
}
```

```
}
```

```
}
```

Teacher's Signature : _____

Package SEE

import CIE.*;

import java.util.*;

public class External extends CIE.Student

{

public int see1[] = new int[5]

Scanner ss = new Scanner (System.in);

public void getInput()

{

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

{

System.out.println ("Enter The SEE marks of
subject " + (i+1) + " out of 100");

{

see1[i] = ss.nextInt();

}

}

}

}


```
Package CIE;
import java.util.Scanner;
public class student
{
    String name, USN;
    int Sem;
    Scanner SS = new Scanner(System.in);
    public void getInput()
    {
        System.out.println("Enter the name of the student");
        name = SS.nextLine();
        System.out.println("Enter the USN Number : ");
        USN = SS.nextLine();
        System.out.println("Enter the Semester : " + Sem);
        Sem = SS.nextInt();
    }
    public void display()
    {
        System.out.println("Name : " + name);
        System.out.println("USN : " + USN);
        System.out.println("Semester : " + Sem);
    }
}
```

Teacher's Signature : _____

```
import CIE.*;
import SEE.*;
import java.util.*;
class totalMarks {
    public static void main (String s[]) {
        int i, j, n;
        int total[] = new int [5];
        Scanner ss = new Scanner (System.in);
        System.out.println ("Enter the no. of students");
        n = ss.nextInt();
        CIE.Student s[] = new CIE.Student[n];
        CIE.Internals i[] = new CIE.Internal[n];
        SEE.External se[] = new SEE.External[n];
        for (i=0; i<n; i++) {
            System.out.println ("Enter Student" + (i+1) + "Details");
            s[i] = new CIE.Student();
            s[i].getInput();
            i[i] = new CIE.Internals();
            i[i].getInput();
            se[i] = new SEE.External();
            se[i].getInput();
        }
    }
}
```

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

```
{
```

```
    System.out.println("Details of student" + (i+1));
```

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

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

```
{
```

```
    total[j] = c1[i].c1s[j] + (set1[set1[j]/2]);
```

```
    System.out.println("Total marks in subject" + (j+1)  
        + " is" + total[j]);
```

```
}
```

```
}
```

```
}
```

```
}
```