8Q)Create a package CIE which has two classes- Student and Internals- a subclass of Student. The class Student 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 Internals. 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.
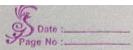
Q Create a package CIE which has two
classes - Student and Internals. The class
Student
personal has members like usn, name, sem.
The class internals has an array that
stores the internal marks scored in five
courses of the current semester of the
student. Create anathor package SEE
which has the class External which is
                    Internals
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 student in all
five courses.

File: Student. Java


```java
package cie;
import java.util.Scanner;


public class Student {
    public String name = new String();
    public String usn  = new String();
    public int sem;
    public student() {
    }

    public void set() {
    Scanner ss = new Scanner(system.in);
    System.out.println("Enter usn, name and
        sem of the student");
```

```
usn = ss.next();
name = ss.next();
sem = ss.next.Int();
}


public void get(){
System.out.println("Usn : "+usn);
System.out.println("Name: " +name);
System.out.println("semester : "+ sem);
}
}
```

file : Internal.java

```
package cie;
import java.util.scanner;

public class Internals extends student {
  public int marks[] = new int[5];
  public Internals() {
  }
  public void setciemarks(){
    Scanner sc = new Scanner(System.in);
    for (int i=0; i<5; i++)
    {
      System.out.println("Enter "+ (i+1)+
      " subject's internal marks (out of 50)");
      marks[i]= sc.next.Int();
    }
  }
}
```

File : Externals.java

```
package sec;

import cie.*;
import java.util.Scanner;

public class Externals extends cie.Internals {
    public int secmarks[] = new int[5];
    public Externals() {
    }
    public void setseemarks() {
        Scanner sc = new Scanner(System.in);
        for (int i = 0; i < 5; i++) {
            System.out.println("Enter " + (i+1) +
            " subject external marks (out of 50)");
            seemarks[i] = sc.nextInt();
        }
    }
}
```

File : Demo.Java

```
import cie.*;
import see.*;
import java.util.Scanner;

class Demo {
    public static void main(String args[])
    {
        Scanner s = new Scanner(System.in);
```

```java
int n;
int finalmarks[] = new int[5];
System.out.println ("Enter the number of
students:  ");
n = s.nextInt();
Externals e[] = new Externals[n];
for (int i=0; i<n; i++)
{
    e[i] = new Externals();
    e[i].set();
    e[i].setciemarks();
    e[i].setseemarks();
}
for (int i=0; i<n; i++) {
    e[i].get();
    System.out.println ("The final marks: ");
    for (int j=0; j<5; j++) {
        finalmarks[j] = e[i].marks[j] +
                       e[i].seemarks[j];
        System.out.println ("course "+(j+1)+
        " : " + finalmarks[j]);
    }
}
}
}
```

Output:

Enter the number of students
1
Enter the susn, name and sem of the student
1BM21CS045
Chinmayi
2
Enter subject 1 internal marks (out of 50)
45
Enter subject 2 internal marks (out of 50)
49
Enter subject 3 internal marks (out of 50)
50
Enter subject 3₁ internal marks (out of 50)
48
Enter Subject 5 internal marks (out of 50)
49
Enter Subject 1 external marks (out of 50)
50
Enter subject 2 enternal marks (out of 50)
47
Enter subject 3 enternal marks (out of 50)
48
Enter subject 4 external marks (out of 50)
46
Enter subject 5 enternal marks (out of 50)
48

Usn : 1BM21CS045
Name : chinmayi
Semester : 2
~~Course 1~~

The final marks :
Course 1 : 95
Course 2 : 96
Course 3 : 98
Course 4 : 94
Course 5 : 97

Output: