

Ques: Create a package CIE which has two classes Student & Internals. The class Student has members like USN, name, Sem. The class Internals has an array that stores the marks scored in five courses of the current semester of the student. Create another package SEE which has the class ~~extended~~ 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.

prg:

```
Package CIE;  
import java.lang.*;  
import java.util.Scanner;  
  
public class Student {  
    private String USN;  
    private String name;  
    private int Sem;  
    Scanner s = new Scanner(System.in);  
  
    public Student() {  
        this("unknown", "unknown", 3);  
    }  
  
    public Student(String USN, String name,  
                    int sem) {  
        this.USN = USN;  
        this.name = name;  
        this.Sem = sem;  
    }  
}
```



```
public String getUSN() {  
    return USN;  
}
```

```
public void setUSN(String USN) {  
    this.USN = USN;  
}
```

```
public String getName() {  
    return name;  
}
```

```
public void setName(String name) {  
    this.name = name;  
}
```

```
public int getSem() {  
    return sem;  
}
```

```
public void getData() {  
    String USN, name;  
    int sem;
```

```
    System.out.println("Enter USN");  
    USN = s.nextLine();  
    setUSN(USN);
```

```
    System.out.println("Enter student name");  
    name = s.nextLine();  
    setName(name);
```

```
    System.out.println("Enter sem");  
    sem = s.nextInt();  
    setSem(sem);  
}
```



```
public void printData() {  
    System.out.println("USN: " + getUSN());  
    System.out.println("Name: " + getName());  
    System.out.println("Sem: " + getSem());  
}
```



```
package CIE;
```

```
public class Internals extends Student {  
    private int[] marks;
```

```
    public Internals() {  
        Super();  
        marks = new int[5];  
    }
```

```
    public int[] getMarks() {  
        return marks;  
    }
```

```
    public void setMarks (int[] marks) {  
        this.marks = marks;  
    }
```

```
    public void getCIEmarks () {  
        for (int i=0; i < 5; i++) {  
            System.out.println("Enter CIE marks in Subjects"  
                                + (i+1));  
            System.out.print(">>>");  
            marks[i] = S.nextInt();
```

```
            if (marks[i] > 50)  
                marks[i] = 50;
```

```
            if (marks[i] < 0)  
                marks[i] = 0;  
        }
```

```
        setMarks(marks);  
    }
```



```

public void printCIEMarks() {
    for (int i=0; i<5; i++) {
        System.out.println("CIE marks in
        Subject " + (i+1) + " : " + mark4[i]);
    }
}

```



```
package SEE;
import java.lang.*;
import java.util.Scanner;

public class SEE extends CIEStudent {
    private int[] marks;
    Scanner s = new Scanner(System.in);

    public SEE() {
        super();
        marks = new int[5];
    }

    public int[] getmarks() {
        return marks;
    }

    public void setmarks(int[] marks) {
        this.marks = marks;
    }

    public void getSEEMarks() {
        for (int i=0 ; i<5 ; i++) {
            System.out.println("Enter SEE marks in  
subject : " + (i+1));
            System.out.println(">>>");
            marks[i] = s.nextInt();

            if (marks[i] > 100)
                marks[i] = 100;

            if (marks[i] < 0)
                marks[i] = 0;
        }
    }
}
```



```

    Set Marks (marks);
}

```

```

public void printSEEMarks() {
    for (int i=0; i<5; i++) {
        System.out.println("SEE marks in subject "
            + (i+1) + ":" + marks[i]);
    }
}
}

```



```
import CIE.Internals;  
import SEE.SEE;  
import java.lang.*;  
import java.util.Scanner;
```

```
public class finalmarks {  
    public static void main(String[] args) {  
        Scanner s = new Scanner(System.in);  
        int n, count;
```

```
        System.out.println("Enter number of students");  
        n = s.nextInt();
```

```
        for (count = 0; count < n; count++) {  
            CIE.Internals cie = new Internat();  
            SEE see = new SEE();
```

```
            cie.getData();  
            cie.getCIEMarks();  
            see.getSEEMarks();
```

```
            int[] CIEMarks = cie.getMarks();  
            int[] SEEMarks = see.getMarks();  
            int[] totalMarks = new int[5];
```

```
            for (int i = 0; i < 5; i++) {  
                totalMarks[i] = CIEMarks[i] + (SEEMarks[i]/2);  
            }
```

```
            cie.printData();  
            System.out.println(".....");  
            cie.printCIEMarks();  
            System.out.println(".....");  
            see.printSEEMarks();  
            System.out.println(".....");
```



```
for (int i=0; i<5; i++) {  
    System.out.println ("Total marks in  
    subject " + " + totalmarks[i]);  
}
```

```
}
```

```
}
```

```
}
```