create pacage CIE which has 2 clurres
students and internall. The class students has
members usn, name, sem. The class derived from
student has an array that stores internal
works spread in 5 subjects

student. Java

```
Pacage CIE
import java.util.Scanner*;
Public class student {
    Protected string usn = new string();
    Protected string name = new string();
    Protected int sum;

    Public void input student details() {
        Scanner s = new Scanner (System.in);
        this.usn = s.nextline();
        this.nave = s.nextline();
        this.sem = s.nextInt();
    }
    Public void displayStudentDetails() {
        System.out.println(this.usn" "+
        this.nave);
    }
}
```

```
Pacage CIE;
import java.util.*;
public class Internals extends student {
    protected int marks[]=new int[];
    public void input(int marks[]) {
        Scanner s = new Scanner(System.in)
        for (int i=0; i<s; i++)
            marks[i] - s.nextInt();
    }
}
```

External.java

```
Pacage SEE.
import CIE.Internals;
import java.util.scanner;
public class externals extends Internals {
    int marks[];
    protected int finalmarks[];
    public Externals() {
        marks = new int[5];
        finalMarks = new int[5]
    }

    public void input SEE marks() {
        for (int i=0; i<s; i++)
            marks[i] = s.nextInt();
    }

    public void calc finalmarks() {
        for (int i=0; i<s; i++)
            final Marks[i] = marks[i]/2;
                + super.marks[i]
```

```
Public void display Final marks() {
    display studentDetails();
    for (i=0; i < s; i++)
        System.out.print ("subject: "+(i+1)+"
        & finalMarks[C.J];
    }
}
```

Main. Java

```
import SEE.Externals;
class Main {
    Public static void main (string args[]) {
        int num of students = 2;
        Externals finalmarks[] = new External
        for (inti=0; i < num of students; i++){
            finalMarks[i] = new Externals();
            finalmarks[] = input studentdetails();
            System.out.println ("Enter CIE marks)
            final marks[] = input CIE marks();
            System.out.println ("Enter SEE");
            final marks[i] = input SEE marks();
        }

        for (int i=0; i < num of students; i++){
            final [i] = calculate Final marks();
            final [i] = display Final Marks();
        }
    }
}
```

```java
Public void display Final marks() {
    display studentDetails();
    for (i=0 ; i < S ; i++)
    System.out print (subject : "+(i+1)+"
    & finalMarks[i]);
    }
}
```

Main. java

```java
import SEE.Externals;
class Main {
    Public static void main (string args[]) {
        int num of students = 2;
        Externals finalmarks[] = new Externals
        for (int i=0 ; i < num of students ; i++) {
            finalMarks[i] = new Externals();
            final marks[i] = input studentdetails();
            System. out. println("Enter CIE marks)
            final marks[i] = input(CIE marks();
            System. out println(" Enter SEE");
            final marks[i] = input SEE marks();
        }
        for (int i=0 ; i < num of students ; i++) {
            final [i] = calculate final marks();
            final [i]. display Final Marks();
        }
    }
}
```

output
Enter student details
1BM22CS282
Name Sudhanva
2
Enter CEE marks
40
45
41
48
44
Enter SEE marks
80
90
86
80
84
Enter student details
1BM22CS271
Shreyas
2
Enter CEE marks
50
45
40
45
45
Enter SEE marks
90
96
100
90
92

Display details
USN: 1BM22CS282
Name: Sudhanva
Sem: 2
Sub1: 80
Sub2: 90
Sub3: 84
Sub4: 88
Sub5: 86
USN: 1BM22CS271
Name: Shashank
Sem: 2
Sub1: 93
Sub2: 90
Sub3: 116
Sub4: 92
Sub5: 90