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```
package CIE;
import java.util.Scanner;
public class Student {
protected String usn = new String();
protected String name = new String();
protected int sem;

public void inputStudentDetails()
{
Scanner s=new Scanner(System.in);
System.out.println("Enter the Student usn:");
usn = s.next();
System.out.println("Enter the student name:");
name = s.next();
System.out.println("Enter the student sem:");
sem = s.nextInt();
}
public void displayStudentDetails()
{
System.out.println("USN:" +usn);
System.out.println("Name:" +name);
System.out.println("Semester:" +sem);
}
}
```

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```
package CIE;
import java.util.Scanner;
public class Internal extends Student
{
 protected int marks[]=new int[5];
 public void inputCIEmarks()
 {
  Scanner si=new Scanner(System.in);
  for(int i=0; i<5; i++)
  {
  System.out.println("Enter internal marks
 of CIE:"+(i+1));
  marks[i]=si.nextInt();
  }
 }
}


package SEE;
import CIE.Internals;
import java.util.Scanner;
public class external extends Internals
{
 protected int marks[];
protected int finalmarks[];
public external()
 {
marks=new int[5];
finalmarks=new int[5];
}
public void inputSEEMarks()
{
Scanner s=new Scanner(System.in);
```

```
for(int i=0; i<5; i++)
{
System.out.println("Subject"+(i+1)+"
        marks:");
marks[i] = s.nextInt();
}
}
public void calculateFinalmarks()
{
for(int i=0; i<5; i++)
finalmarks[i] = marks[i]/2 + subex.marks[i];
}
public void displayFinalmarks()
{
displayStudentDetails();
for(int i=0; i<5; i++){
System.out.println("Subject" + (i+1) + ":
        " + finalmarks[i]);
}
}

Import java.util.*;
class main
{
public static void main(String args[])
{
int numofstudents=2;
external finalmarks[] = new.
```

(complete)

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```
external[numofStudents];
for(int i=0; i<numofStudents; i++)
{
  finalMarks[i]= new external();
  finalMarks[i].inputStudentDetails();
  System.out.println("Enter CIE marks "+(i+1));
  finalMarks[i].inputCIEmarks();
  System.out.println("Enter SEE marks "+(i+1));
  finalMarks[i].inputSEEmarks();
}
System.out.println("Displaying data:\n");
for(int i=0; i<numofStudents; i++)
{
  finalmarks[i].calculateFinalMarks();
  finalMarks[i].displayFinalMarks();
  }
 }
}
```

output

```
Enter the student usn: 2023BMS02609
Enter the student name: Prakruthi.
Enter the studnt sem: 3.
Enter CIE marks:1
Enter internal marks of CIE:1
24
Enter internal marks of CIE:2
35
Enter internal marks of CIE:3
33
Enter internal marks of CIE:4
```

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27.
Enter Internal marks of CIE : 5
46.
Enter SEE marks 1 34
Subject 1 marks : 34
Subject 2 marks : 36
Subject 3 marks : 45
Subject 4 marks : 35
Subject 5 marks : 36.
Enter the student usn : 2023BMS02608
Enter the student name : Rachana
Enter the student sem : 3
Enter CIE marks 2.
Enter Internal marks of CIE : 1
24
Enter Internal marks of CIE : 2
25
Enter Internal marks of CIE : 3
26
Enter Internal marks of CIE : 4
27
Enter Internal marks of CIE : 5.
28
Enter SEE marks 2
Subject 1 marks : 32
Subject 2 marks : 34
Subject 3 marks : 33
Subject 4 marks : 26
Subject 5 marks : 38.

Displaying data :

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USN: 1BM2023BMS02609
Name: Prakruthi
Semester: 3
Subject 1: 41
Subject 2: 63
Subject 3: 55
Subject 4: 44
Subject 5: 64
USN: 1BM2023BMS02608
Name: Rachana
Semester: 3
Subject 1: 40
Subject 2: 42
Subject 3: 42
Subject 4: 40
Subject 5: 47.