

Create a package CIE which has two classes- Student and Internals. The class 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 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 two packages in a file that declares the final marks of n students in all five courses.

```
package cie;
```

```
public class Internals {
```

```
    public int internal_marks []=new int[5];
```

```
}
```

```
package cie;
```

```
public class Student {
```

```
    public String name;
```

```
    public int usn;
```

```
    public int sem;
```

```
}
```

```
package see;
```

```
import cie.Student;
```

```
public class External extends Student {
```

```
    public int external[]=new int[5];
```

```
}
```

```
import java.util.Scanner;
```

```

import cie.Internals;
import see.External;
public class Marks {

    public static void main(String[] args) {
        int n;
        Scanner sc=new Scanner(System.in);
        System.out.println("enter number of students");
        n=sc.nextInt();
        External student[]=new External[n];
        Internals internal[]=new Internals[n];
        int final_marks[][]=new int[n][5];
        for(int i=0;i<n;i++)
        {
            student[i]=new External();
            internal[i]=new Internals();
            System.out.println("Enter Student "+(i+1)+" name and usn and
sem respectively");
            student[i].name=sc.next();
            student[i].usn=sc.next();
            student[i].sem=sc.nextInt();
            System.out.println("Enter Internal marks of 5 subject in
respective order");
            for(int j=0;j<5;j++)
            {
                internal[i].internal_marks[j]=sc.nextInt();
            }
            System.out.println("Enter external marks of 5 subject in
respective order");

```

```

        for(int k=0;k<5;k++)
        {

            student[i].external[k]=sc.nextInt();

        }
    }
    for(int i=0;i<n;i++)
    {
        for(int j=0;j<5;j++)

final_marks[i][j]=internal[i].internal_marks[j]+(int)(student[i].external[j]/2);
    }
    for(int i=0;i<n;i++)
    {
        System.out.println("Name: "+student[i].name);
        System.out.println("USN: "+student[i].usn);
        System.out.println("Sem: "+student[i].sem);
        System.out.println("Marks of the student "+(i+1)+" is");
        for(int j=0;j<5;j++)
        {
            System.out.println(final_marks[i][j]);
        }
    }
}
}
}

```

```
C:\Users\Subhash D\OneDrive\Desktop\Java Notepad>java Marks
enter number of students
1
Enter Student 1 name and usn and sem respectively
Subhash
cs221
2
Enter Internal marks of 5 subject in respective order
23
34
45
43
32
Enter external marks of 5 subject in respective order
56
67
78
89
90
Name: Subhash
USN: cs221
Sem: 2
Marks of the student 1 is
51
67
84
87
77
```