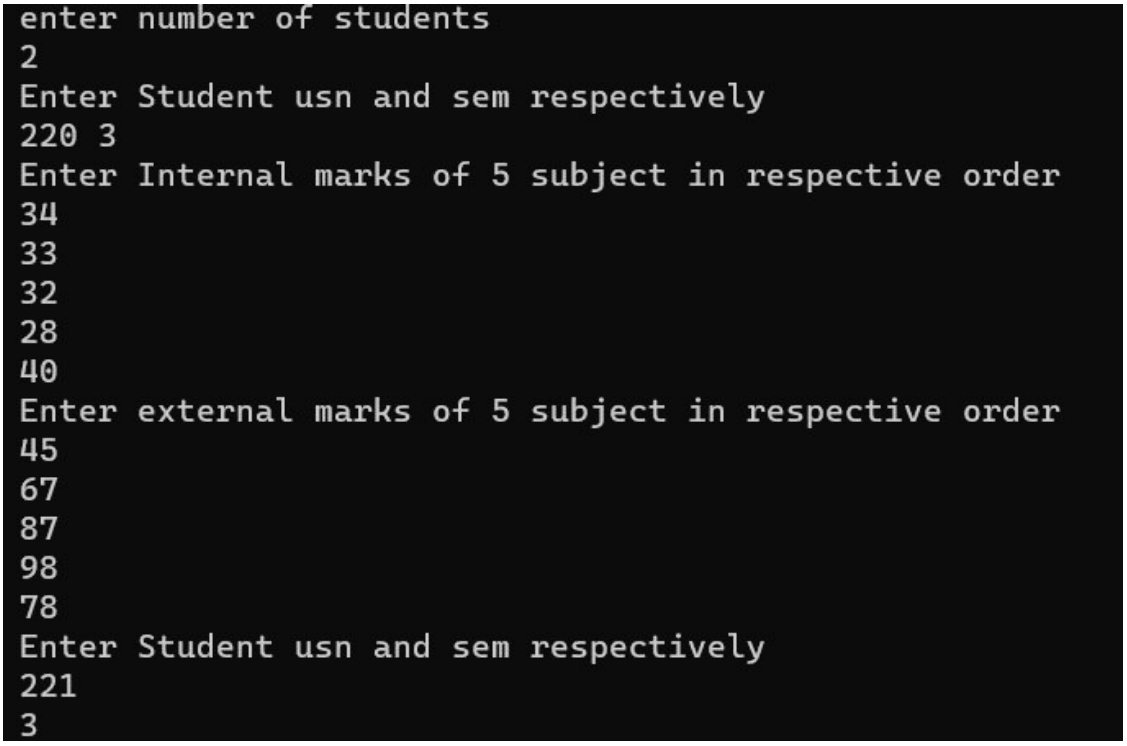
WEEK_ 8

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[]=new int[5]; }

package cie;
public class Student {
        public String name;
        public int usn;
        public int sem;
}

package see;
import cie.Internals;
public class External extends Internals
{ public int external[]=new int[5]; }

import java.util.Scanner;
import cie.Student;
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];
		Student details[]=new Student[n];
		int final_marks[][]=new int[n][5];
		for(int i=0;i<n;i++)
		{
			student[i]=new External();
			details[i]=new Student();
			System.out.println("Enter Student usn and sem respectively");
			details[i].usn=sc.nextInt();
			details[i].sem=sc.nextInt();
			System.out.println("Enter Internal marks of 5 subject in respective
order");
			for(int j=0;j<5;j++)
			{ student[i].internal[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]=student[i].internal[j]+(int)(student[i].external[j]/2);
		}
		for(int i=0;i<n;i++)
		{
```

```
                System.out.println("USN: "+details[i].usn);
                System.out.println("Sem: "+details[i].sem);
                System.out.println("Marks of the student is");
                for(int j=0;j<5;j++)
                { System.out.println(final_marks[i][j]);}
            }
        }
}
```



```
Enter external marks of 5 subject in respective order
45
67
87
98
78
Enter Student usn and sem respectively
221
3
Enter Internal marks of 5 subject in respective order
30
28
34
40
43
Enter external marks of 5 subject in respective order
89
87
76
65
54
USN: 220
Sem: 3
Marks of the student is
56
66
75
77
79
USN: 221
Sem: 3
Marks of the student is
74
71
72
72
70
```