1.

```
// Student
package CIE;
public class Student
{
    public String name;
    public String usn;
    public int sem;

    public Student(String name, String usn, int sem)
    {
        this.name = name;
        this.usn = usn;
        this.sem = sem;
    }
}

// Internals
package CIE;

public class Internals extends CIE.Student
{
    public int[] InternalMarks;

    public Internals(String name, String usn, int sem, int[] InternalMarks)
    {
        super(name, usn, sem);
        this.InternalMarks = InternalMarks;
    }
}
```

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// Extends

```
package SE12;
import CIE.student;

public class Extends extends Student
{
    public int[] SeeMarks;
    public Extends(String name, String usn, int sem, int[] SeeMarks)
    {
        super(name, usn, sem);
        this.SeeMarks = SeeMarks;
    }
}
```

// Final Marks

```
import CIE.student;
import CIE.Internals;
import SEE.Externals;
import java.util.Scanner;

public class FinalMarks
{
    public static void main(String[] args)
    {
        Scanner s1 = new Scanner(System.in);
        System.out.println("Enter the number of students");
        int n = s1.nextInt();

        String[] names = new String[n];
        String[] usn = new String[n];
        int[] sem = new int[n];
        int[][] finalMarks = new int[n][5];
        int[][] SeeMarks = new int[n][5];
```

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```
for(int i=0;i<n;i++)
{
System.out.println("Enter details of Student"+(i+1)+":");
System.out.println("Name:");
name[i]=sc.next();
System.out.println("USN");
usn[i]=sc.next();
System.out.println("Sem");
sem[i]=sc.nextInt();
System.out.println("Enter internal Marks for 5 courses");

for(int j=0;j<5;j++)
{
System.out.println("Course"+(j+1)+":");
internal Marks[i][j]=sc.nextInt();
}
System.out.println("Enter internal marks for 5 courses");
for(j=0;j<5;j++)
{
System.out.println("course"+(j+1)+":");
see Marks[i][j]=sc.nextInt();
}
int[][] finalmarks=new int[n][5];
for(int i=0;i<n;i++)
{
Internals I1=new Internals(name[i],usn[i],sem[i],internal Marks[i]);
External E1=new External(name[i],usn[i],sem[i],see Marks[i]);

for(int j=0;j<5;j++)
{
final Marks[i][j]=I1.internal Marks[j]+E1.see Marks[j];
}
System.out.println("Final Marks for"+name+"Students:");
```

```
for(i=0; i<n; i++)
{
    System.out.println(name[i] + ":");
    for(int j=0; j<5; j++)
    {
        System.out.println("Enter marks[i][j] + ":");
    }
    System.out.println();
}
s1.close();
}
}
```

Output:

Enter number of students:
Enter name: 1
Enter USN: 1
Enter Sem: 1
Enter internal marks for 5 courses:
30
10
9
10
9
Enter the marks for 5 course
10
9
9
10
9
Enter marks of 5 courses:
1: 24