

multilevel.java x

```
1  import java.util.Scanner;
2  class Student{
3      String usn,name;
4      int sem;
5      Scanner ss=new Scanner(System.in);
6      void getdata(){
7          System.out.println("Enter the name of the student:");
8          name=ss.nextLine();
9          System.out.println("Enter the USN of the student:");
10         usn=ss.next();
11         System.out.println("Enter the semester:");
12         sem=ss.nextInt();
13     }
14     void display1(){
15         System.out.println("Name:"+name);
16         System.out.println("USN:"+usn);
17         System.out.println("Semester:"+sem);
18     }
19 }
20 class Test extends Student{
21     int cie[];
22     static int m;
23     int credits[];
24     void getciemarks(){
25         Scanner ss=new Scanner(System.in);
26         System.out.println("Enter number of subjects:");
27         m=ss.nextInt();
28         cie=new int[m];
29         credits=new int[m];
30         for(int i=0;i<m;i++){
31             System.out.println("Enter the cie marks and credits of subject "+(i+1)+":");
32             cie[i]=ss.nextInt();
33             credits[i]=ss.nextInt();
34         }
35     }
36     void display2(){
37         for(int i=0;i<m;i++){
38             System.out.println("Subject "+(i+1)+":");
39             System.out.println("CIE marks:"+cie[i]);
40             System.out.println("Credits:"+credits[i]);
41         }
42     }
43 }
44 }
45 class Exam extends Test{
```



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44 }
45 class Exam extends Test{
46     int see[];
47     void getseemarks(){
48         Scanner ss=new Scanner(System.in);
49         see=new int[m];
50         for(int i=0;i<m;i++){
51             System.out.println("Enter the SEE marks of subject "+(i+1)+":");
52             see[i]=ss.nextInt();
53         }
54     }
55     void display3(){
56         for(int i=0;i<m;i++){
57             System.out.println("SEE marks:"+see[i]);
58         }
59     }
60 }
61 class Result extends Exam{
62     double total=0,sgpa=0;
63     int credit=0;
64     int grade[];
65     void calc_result(){
66         grade=new int[m];
67         for(int i=0;i<m;i++){
68             total+=(see[i]/2)+cie[i];
69         }
70         for(int i=0;i<m;i++){
71             if(total>=90)
72                 grade[i]=10;
73             else if(total>=80)
74                 grade[i]=9;
75             else if(total>=70)
76                 grade[i]=8;
77             else if(total>=60)
78                 grade[i]=7;
79             else if(total>=50)
80                 grade[i]=6;
81             else if(total>=40)
82                 grade[i]=5;
83             else
84                 grade[i]=4;
85             sgpa+=grade[i]*credits[i];
86             credit+=credits[i];
87         }
88         sgpa=sgpa/(credit);
```

```
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74     grade[i]=9;
75     else if(total>=70)
76     grade[i]=8;
77     else if(total>=60)
78     grade[i]=7;
79     else if(total>=50)
80     grade[i]=6;
81     else if(total>=40)
82     grade[i]=5;
83     else
84     grade[i]=4;
85     sgpa+=grade[i]*credits[i];
86     credit+=credits[i];
87 }
88 sgpa=sgpa/(credit);
89 }
90 void display(){
91     System.out.println("SGPA:"+sgpa);
92 }
93 }
94 class Studentmain1{
95     public static void main(String args[]){
96         Scanner ss=new Scanner(System.in);
97         int i;
98         System.out.println("Enter the number of students:");
99         int n=ss.nextInt();
100         Result r[]=new Result[n];
101         for(i=0;i<n;i++){
102             r[i]=new Result();
103             System.out.println("-----Enter the details of student "+(i+1)+"-----");
104             r[i].getdata();
105             r[i].getciemarks();
106             r[i].getseemarks();
107         }
108         for(i=0;i<n;i++){
109             System.out.println("-----Details of student "+(i+1)+"-----");
110             r[i].display1();
111             r[i].display2();
112             r[i].display3();
113             r[i].calc_result();
114             r[i].display();
115         }
116     }
117 }
```

C:\Program Files\Java\bin\basic>javac multileveli.java

C:\Program Files\Java\bin\basic>java Studentmain1

Enter the number of students:

2

-----Enter the details of student 1-----

Enter the name of the student:

harshitha

Enter the USN of the student:

1bm19cs059

Enter the semester:

2

Enter number of subjects:

2

Enter the cie marks and credits of subject 1:

45

3

Enter the cie marks and credits of subject 2:

43

2

Enter the SEE marks of subject 1:

89

Enter the SEE marks of subject 2:

90

-----Enter the details of student 2-----

Enter the name of the student:

kushi

Enter the USN of the student:

1bm19cs089

Enter the semester:

3

Enter number of subjects:

2

Enter the cie marks and credits of subject 1:

42

5

Enter the cie marks and credits of subject 2:

34

3

Enter the SEE marks of subject 1:

```
ca: Command Prompt
Enter number of subjects:
2
Enter the cie marks and credits of subject 1:
42
5
Enter the cie marks and credits of subject 2:
34
3
Enter the SEE marks of subject 1:
88
Enter the SEE marks of subject 2:
87
-----Details of student 1:-----
Name:harshitha
USN:1bm19cs059
Semester:2
Subject 1:
CIE marks:45
Credits:3
Subject 2:
CIE marks:43
Credits:2
SEE marks:89
SEE marks:90
SGPA:10.0
-----Details of student 2:-----
Name:kushi
USN:1bm19cs089
Semester:3
Subject 1:
CIE marks:42
Credits:5
Subject 2:
CIE marks:34
Credits:3
SEE marks:88
SEE marks:87
SGPA:10.0
C:\Program Files\Java\bin\basic>
```