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Week6_3.java x Ip3_2.java x Inheri2_abstract.java x Week_7_Inheritance1.java x Ip4.java x Week6_7.java x Week6_6,j
1 package com.company;
2 import java.util.Scanner;
3 class Stud{
4     String usn,name;
5     int sem;
6     Scanner s=new Scanner(System.in);
7     void accept_details(){
8         System.out.println("Semester:");
9         sem=s.nextInt();
10        s.nextLine();
11        System.out.println("Name:");
12        name=s.nextLine();
13        System.out.println("USN:");
14        usn=s.nextLine();
15    }
16    void display_details(){
17        System.out.println("Name : "+name);
18        System.out.println("USN : "+usn);
19    }
20 }
21 class Test extends Stud{
22     int[] cie,credits;
23     int num_courses;
24     Scanner s=new Scanner(System.in);
25     void get_num_courses(){
26         System.out.println("Enter the number of courses:");
27         num_courses=s.nextInt();
```

Week6\_3.java x Ip3\_2.java x Inheri2\_abstract.java x Week\_7\_Inheritance1.java x Ip4.java x Week6\_7.java x Week6\_6.java x

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28     }
29     void get_cie_and_credits(){
30         cie=new int[num_courses];
31         credits=new int[num_courses];
32         for (int i=0;i<num_courses;i++){
33             System.out.println("Enter the number of credits for course"+(i+1)+":");
34             credits[i]=s.nextInt();
35             System.out.println("Enter the cie marks for course"+(i+1)+":");
36             cie[i]=s.nextInt();
37         }
38     }
39     void display_cie_credits(){
40         for (int i=0;i<num_courses;i++){
41             System.out.println("Credits for course"+(i+1)+":"+credits[i]);
42             System.out.println("cie marks for course"+(i+1)+":"+cie[i]);
43         }
44     }
45 }
46 class Exam extends Test {
47     int[] see;
48     int sum=0;
49     Scanner s=new Scanner(System.in);
50     void get_see() {
51         see=new int[num_courses];
52         for (int i = 0; i < num_courses; i++) {
53             System.out.println("Enter the see marks for course" + (i+1) + ":");
54             see[i] = s.nextInt();

```



```
Week6_3.java x lp3_2.java x Inheri2_abstract.java x Week_7_Inheritance1.java x lp4.java x Week6_7.java x Week6_6.java
55     }
56 }
57 void display_see() {
58     for (int i = 0; i < num_courses; i++) {
59         System.out.println("see marks for course" + (i+1) + ":" + see[i]);
60     }
61 }
62 int sum_credits(){
63     for (int i = 0; i < num_courses; i++) {
64         sum+=credits[i];
65     }
66     return sum;
67 }
68 }
69 class Result extends Exam{
70     float gppa, total, total_marks=0;
71     float[] grade;
72     Scanner s=new Scanner(System.in);
73     float calculate_gppa(){
74         grade=new float[num_courses];
75         for (int i=0; i<num_courses; i++){
76             total+=((float)see[i]/2)*cie[i];
77             if (total>=90){
78                 grade[i]=10;
79             }
80             else if (total>=80){
81                 grade[i]=9;
```

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Week6_3.java × Ip3_2.java × Inheri2_abstract.java × Week_7_Inheritance1.java × Ip4.java × Week6_7.java
82     }
83     else if (total >= 70){
84         grade[i]=8;
85     }
86     else if (total >= 60){
87         grade[i]=7;
88     }
89     else if (total >= 50){
90         grade[i]=6;
91     }
92     else if (total >= 40){
93         grade[i]=5;
94     }
95     else{
96         grade[i]=0;
97     }
98     total_marks+=grade[i]*credits[i];
99 }
100 sgpa=total_marks/sum_credits();
101 return sgpa;
102 }
103 }
104 public class Week_7_Inheritance1 {
105     public static void main(String[] args){
106         Scanner s=new Scanner(System.in);
107         Result r=new Result();
108         float sgpa;
```



```
104 ▶ public class Week_7_Inheritance1 {
105 ▶     public static void main(String[] args){
106         Scanner s=new Scanner(System.in);
107         Result r=new Result();
108         float sgpa;
109         int n;
110         System.out.println("Enter the number of students:");
111         n=s.nextInt();
112         for (int i=0;i<n;i++){
113             System.out.println("Enter the details of students"+(i+1)+":");
114             r.accept_details();
115             r.get_num_courses();
116             r.get_cie_and_credits();
117             r.get_see();
118             sgpa=r.calculate_sgpa();
119             r.display_details();
120             r.display_cie_credits();
121             r.display_see();
122             System.out.println("sgpa: "+sgpa);
123         }
124     }
125 }
126 |
```

Run: Week\_7\_Inheritance1 x

"C:\Program Files\Java\jdk1.8.0\_261\bin\java.exe" ...

Enter the number of students:

2

Enter the details of students1:

Semester:

3

Name:

Jahnavi

USN:

6065

Enter the number of courses:

3

Enter the number of credits for course1:

4

Enter the cie marks for course1:

80

Enter the number of credits for course2:

3

Enter the cie marks for course2:

70

Enter the number of credits for course3:

1

Enter the cie marks for course3:

50

Enter the see marks for course1:

100

Enter the see marks for course2:



```
Run: Week_7_inheritance
Enter the see marks for course3:
100
Name : Jahnavi
USN : bm65
Credits for course1:4
cie marks for course1:50
Credits for course2:5
cie marks for course2:50
Credits for course3:1
cie marks for course3:50
see marks for course1:100
see marks for course2:100
see marks for course3:100
sgpa:10.0
Enter the details of students2:
Semester:
5
Name:
Aditi Kulkarni
USN:
bm65
Enter the number of courses:
3
Enter the number of credits for course1:
4
Enter the cie marks for course1:
50
```

Enter the number of credits for course2:

5

Enter the cie marks for course2:

49

Enter the number of credits for course3:

1

Enter the cie marks for course3:

43

Enter the see marks for course1:

98

Enter the see marks for course2:

90

Enter the see marks for course3:

89

Name : Adithi

USN : bm03

Credits for course1:4

cie marks for course1:45

Credits for course2:5

cie marks for course2:49

Credits for course3:1

cie marks for course3:43

see marks for course1:98

see marks for course2:90

see marks for course3:89

sgpa:9.95