

Date: 27 October 2020, Name: Shritik Singh, USN: 1BM19S0638

## Wk - 7 Extra Program:-

Q1.

Output:-

```
import java.util.Scanner;
class Student
{
    String usn, name;
    int sem;
    Scanner get = new Scanner (System.in);
    void get Stud Info (int m)
    {
        System.out.print("1 n Student / .d", m + );
        System.out.print ("Name :"); name = get.next();
        System.out.print ("USN :"); usn = get.next();
        System.out.print ("Sem Number :"); sem = get.nextInt();
    }
}
```

3

class Test extends Student

{

```
int n;
int cieMarks [];
int corresCredits [];
Scanner get = new Scanner (System.in);
void get Test Info ()
{
```

```
System.out.print ("Enter the no. of courses : "); n = get.nextInt();
cieMarks = new int [n];
corresCredits = new int [n];
System.out.print ("\nEnter course credit and Marks obtained : ");
for (int i = 0; i < n; i++)
{
```

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System.out.printf ("\\n Course .%d": i + 1);

System.out.printf ("\\n Course Credit and CIE marks (out of 50) obtained")  
Courses Credits [i] = get.nextInt();

CIE Marks [i] = get.nextInt();

}

}

class Exam extends Test

{

int SeeMarks [];

Scanner get = new Scanner (System.in);

void getExamInfo()

SeeMarks = new int [n];

System.out.printf ("\\nEnter the SEE Marks (out of 100) of %d courses: ", n);

for (int i = 0; i < n; i++)

{

SeeMarks [i] = get.nextInt();

}

}

class Result extends Exam

{

double Sgpa = 0;

int gradePoint (double num)

if (num >= 50)

return (int) (Math.ceil (num / 10));

else

if (num >= 40)

return 4;

else

return 0;

}

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void calculation()

```
double marksSum = 0, creditSum = 0;
for (int i = 0; i < n; i++)
```

$$\text{marks Sum} += \text{gradePoint}[(\text{SeeMarks}[i]/2) + \text{cieMarks}[i]] * \text{corresCredits}[i];$$

$$\text{Credit Sum} += \text{corresCredits}[i];$$

$$sgpa = \text{marks Sum} / \text{credit Sum};$$

void displayInfo (int n)

```
System.out.print("In In Student %d", n+1);
```

```
System.out.print("In Name : %s", name);
```

```
System.out.print("In USN: %s", usn);
```

```
System.out.print("In Sem Number: %d", sem);
```

```
System.out.print("In Course Credits:");
```

```
for (int i = 0; i < n; i++)
```

```
{ System.out.print("%d", corresCredits[i]); }
```

```
System.out.print("In SEE marks (out of 50): ");
```

```
for (int i = 0; i < n; i++)
```

```
{ System.out.print("%d", cieMarks[i]); }
```

```
System.out.print("In SEE marks (out of 100): ");
```

```
for (int i = 0; i < n; i++)
```

```
{ System.out.print("%d", seeMarks[i]); }
```

```
System.out.print("In SGPA : %.2f", sgpa);
```

class StudMain

```
public static void main (String[] args)
```

```
int noStud;
```

Date : 27 October 2020, Name : Ibratik Singh, USN :- 1 BM 19 CS 063

result  $\rightarrow [ ]$ :

Scanner get = new Scanner (System.in);

System.out.print("Enter the no of students: ")

noStud = get.nextInt();

or = new result [noStud];

for (int i = 0; i < noStud; i++)

$\rightarrow [i] = \text{new result}();$

$\rightarrow [i].getStudInfo(i);$

$\rightarrow [i].getTestInfo();$

}

System.out.print("All students data saved: ")

for (int i = 0; i < noStud; i++)

{

$\rightarrow [i].calculation();$

{

System.out.print("The student details as follows: ")

for (int i = 0; i < noStud; i++)

{

$\rightarrow [i].displayInfo(i);$

{

### Output of the above Program

Enter The no of Students: 2

Student 1. Name : Ibratik

USN : 1 BM 19 CS 063

Sem Number : 3.

Enter the No. of courses : 3

Enter course credit and Marks obtained.

Course 1 :

course Credit and CIE marks (out of 50) obtained: 3 45

Name: Ibritish Singh, USN: IBM19CS063, Date: 27 October 2020

Course 2:

Course Credit and CIE Marks (out of 50) obtained: 4 50

Course 3:

Course Credit and CIE marks (out of 50) obtained: 2 46.

Enter the SEE marks (out of 100) of 3 courses: 89.

Student 2 Name:

Rishi

USN: 4ndfc4

Sem Number: 3.

Enter the No. of course: 3

Course 1:

Course Credit and CIE Marks (out of 50) obtained: 3 50

Course 2:

Course Credit and CIE Marks (out of 50) obtained: 4 39.

Course 3:

Course Credit and CIE Marks (out of 50) obtained: 2 49.

Enter the SEE marks (out of 100) of 3 courses: 89, 44

All students data Saved.

The student details as follows:

Student 1.

Name: Ibritish

USN: IBM19CS063

Sem Number: 3

Course Credits: 3 42

CIE Marks (out of 50): 45 50 46

SEE Marks (out of 100) = 89 345 45.

SGPA: 14.78.

Student 2:

Pouye no.: ⑥.

Name: Sritik Singh, USN: IBM19CS063, Date: 27 October 2020.

Name: rishu

USN: 4hdfc4

Sem Number: 3

Course Credits: 3 4 2

CIE Marks (out of 50): 50 39 49

SEE Marks (out of 100): 89 44.

SGPA: 6.44.

C:\Users\hrithi\Documents\studentsee.java - Notepad++

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www.java whathappened.java practicehelloworld.java PalindromeString c kyzw.java segment.java samsung.java studentsee.java Playermain.java

```
42 L}
43 class exam extends test
44 {
45     int seeMarks[];
46     Scanner get = new Scanner(System.in);
47
48     void getExamInfo()
49     {
50         seeMarks=new int[n];
51         System.out.printf("\n Enter the SEE Marks (out of 100) of %d Courses: ",n);
52         for (int i=0;i<n;i++)
53         {
54             seeMarks[i]=get.nextInt();
55         }
56     }
57
58 }
59
60 class result extends exam
61 {
62     double sgpa=0;
63
64     int gradePoint(double num)
65     {
66         if(num>=50)
67             return (int)(Math.ceil(num/10));
68         else
69             if(num>=40)
70                 return 4;
71             else
72                 return 0;
73     }
74
75     void calculation()
76     {
77         double marksSum=0,creditSum=0;
78         for(int i=0;i<n;i++)
79         {
80
81             marksSum+=gradePoint((seeMarks[i]/2)+cieMarks[i])*corresCredits[i];
82             creditSum+=corresCredits[i];
83         }
84         sgpa=marksSum/creditSum;
85     }
}
```

Command Prompt

Sem Number:3

Enter the No of courses : 3

Enter Course credit And Marks obtained :

Course 1:  
Course Credit and CIE Marks(out of 50) Obtained : 3 45

Course 2:  
Course Credit and CIE Marks(out of 50) Obtained : 4 50

Course 3:  
Course Credit and CIE Marks(out of 50) Obtained : 2 46

Enter the SEE Marks (out of 100) of 3 Courses: 89

345

45

Student 2 Name:  
rishi  
Usn:4hdfc4  
Sem Number:3

Enter the No of courses : 3

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www.java whathappened.java practicehelloworld.java PalindromeString.c xyzw.java seg

Command Prompt

```
Microsoft Windows [Version 10.0.18363.1139]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\hriti>cd..
C:\Users\hriti>cd..
C:\>cd C:\Users\hriti\Documents

C:\Users\hriti\Documents>javac studentsee.java
C:\Users\hriti\Documents>java studMain

Enter The no of Students :2

Student 1 Name:hritik
Usn:1bm19cs063
Sem Number:3

Enter the No of courses : 3

Enter Course credit And Marks obtained :

Course 1:
Course Credit and CIE Marks(out of 50) Obtained : 3 45

Course 2:
Course Credit and CIE Marks(out of 50) Obtained : 4 50

Course 3:
Course Credit and CIE Marks(out of 50) Obtained : 4 50

Enter the No of courses : 3

Enter Course credit And Marks obtained :

Course 1:
Course Credit and CIE Marks(out of 50) Obtained : 3 45

Course 2:
Course Credit and CIE Marks(out of 50) Obtained : 4 50

Course 3:
Course Credit and CIE Marks(out of 50) Obtained : 4 50
```

Java source file length:2,935 lines:139 Ln:44 Col:2 Sel:0|0 Windows (CR LF) UTF-8 INS

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File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

www.java whathappenedjava practicehelloworld.java PalindromeString c kyzw.java segment.java samsung.java studentsee.java Playermain.java

```
96     {System.out.printf(" %d ",corresCredits[i]);}
97     System.out.printf("\n CIE Marks(out of 50) : ");
98     for(int i=0;i<n;i++)
99     {System.out.printf(" %d ",cieMarks[i]);}
100    System.out.printf("\n SEE Marks(out of 100) : ");
101   for(int i=0;i<n;i++)
102   {System.out.printf(" %d ",seeMarks[i]);}
103   System.out.printf("\n SGPA : %.2f ",sgpa);
104 }
105 }
106 }
107 }
108 }
109 class studMain
110 {
111     public static void main(String[] args)
112     {
113         int noStud;
114         result r[];
115         Scanner get = new Scanner(System.in);
116         System.out.print("\n Enter The no of Students : ");
117         noStud=get.nextInt();
118         r=new result[noStud];
119         for(int i=0;i<noStud;i++)
120         {
121             r[i]=new result();
122             r[i].getStudInfo(i);
123             r[i].getTestInfo();
124             r[i].getExamInfo();
125         }
126         System.out.print("\n All Students data Saved : ");
127         for(int i=0;i<noStud;i++)
128         {
129             r[i].calculation();
130         }
131         System.out.print("\n The Student Deatils As Follows: \n");
132         for(int i=0;i<noStud;i++)
133         {
134             r[i].displayInfo(i);
135         }
136     }
137 }
138 }
139 }
```

Command Prompt

Course 3:  
Course Credit and CIE Marks(out of 50) Obtained : 2 49  
Enter the SEE Marks (out of 100) of 3 Courses: 89  
4  
4  
All Students data Saved :  
The Student Deatils As Follows:

Student 1  
Name: hrithik  
Usn: 1bm19cs063  
Sem Number: 3  
Course Credits : 3 4 2  
CIE Marks(out of 50) : 45 50 46  
SEE Marks(out of 100) : 89 345 45  
SGPA : 14.78

Student 2  
Name: rishi  
Usn: 4hdfc4  
Sem Number: 3  
Course Credits : 3 4 2  
CIE Marks(out of 50) : 50 39 49  
SEE Marks(out of 100) : 89 4 4  
SGPA : 6.44

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www.java whathappened.java practicehelloworld.java PalindromeString.c xyzw.java segmentjava samsung.java studentsee.java Playermain.java

```
81 marksSum+=gradePoint((seeMarks[i]/2)+cieMarks[i])*corresCredits[i];
82 creditSum+=corresCredits[i];
83 }
84 sgpa=marksSum/creditSum;
85
86
87 void displayInfo(int m)
88 {
89     System.out.printf("\n\n Student %d",m+1);
90     System.out.printf("\n Name: %s",name);
91     System.out.printf("\n Usn: %s",usn);
92     System.out.printf("\n Sem Number: %d",sem);
93     System.out.printf("\n Course Credits :");
94     for(int i=0;i<n;i++)
95     {
96         System.out.print(" %d ",corresCredits[i]);
97     }
98     System.out.printf("\n CIE Marks(out of 50) :");
99     for(int i=0;i<n;i++)
100    {
101        System.out.print(" %d ",cieMarks[i]);
102    }
103    System.out.printf("\n SEE Marks(out of 100) :");
104    for(int i=0;i<n;i++)
105    {
106        System.out.print(" %d ",seeMarks[i]);
107    }
108    System.out.println(" SGPA : %.2f ",sgpa);
109
110 class studMain
111 {
112     public static void main(String[] args)
113     {
114         int noStud;
115         result r[];
116         Scanner get = new Scanner(System.in);
117         System.out.printf("\n Enter The no of Students :");
118         noStud=get.nextInt();
119         r=new result[noStud];
120         for(int i=0;i<noStud;i++)
121         {
122             r[i]=new result();
123             r[i].getStudInfo(i);
124             r[i].getTestInfo();
125         }
126     }
127 }
```

Command Prompt

```
Course Credit and CIE Marks(out of 50) Obtained : 3 50
Course 2:
Course Credit and CIE Marks(out of 50) Obtained : 4 39
Course 3:
Course Credit and CIE Marks(out of 50) Obtained : 2 49
Enter the SEE Marks (out of 100) of 3 Courses: 89
4
All Students data Saved :
The Student Details As Follows:
```

```
Student 1
Name: hrithik
Usn: 1bm19cs063
Sem Number: 3
Course Credits : 3 4 2
CIE Marks(out of 50) : 45 50 46
SEE Marks(out of 100) : 89 345 45
SGPA : 14.78

Student 2
Name: rishi
Usn: 4hdfc4
Sem Number: 3
Course Credits : 3 4 2
```

Java source file length:2,935 lines:139 Ln:44 Col:2 Sel:0|0 Windows (CR LF) | UTF-8 | INS

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