LAB -7 PRACTICE PROGRAMS

PROGRAM 1 :

INPUT :

```java
import java.util.Scanner;

class Student
{
    String usn;
    String name;
    int sem;
    Scanner ss = new Scanner(System.in);

    void accept1()
    {
        System.out.println("\n<-----ENTER THE BASIC STUDENT DETAILS----->\n");
        System.out.println("Enter the Student USN :");
        usn = ss.next();
        System.out.println("Enter the Student NAME :");
        name = ss.next();
        System.out.println("Enter the SEMESTER of the Student :");
        sem = ss.nextInt();
        System.out.println("\n<---------------------------------------->\n");
    }
}

class Test extends Student
{
    int cred[];
    int cie[];
    int i;
    int n;

    void accept2()
    {

        System.out.print("Enter the number of subjects : ");
        n = ss.nextInt();
        cred = new int[n];
        cie = new int[n];
        System.out.println("\nEnter the Credits and CIE Marks in each of the "+n+" Subjects :\n");
        for(i = 0; i < n; i++)
        {
            System.out.print("Enter the Credits of Subject "+(i+1)+" : ");
            cred[i] = ss.nextInt();
            System.out.print("Enter the CIE Marks scored in Subject "+(i+1)+" : ");
            cie[i] = ss.nextInt();
            System.out.println();
        }
    }
}

class Exam extends Test
{
    int see[];
    int i;

    void accept3()
    {
        see = new int[n];
        System.out.println("\nEnter the corresponding SEE marks of each of the "+n+" Subjects :\n");
        for(i = 0; i < n; i++)
        {
            System.out.print("Enter the SEE Marks scored in Subject "+(i+1)+" : ");
            see[i] = ss.nextInt();
        }
    }
}

class Result extends Exam
{
    char grade;
    float total;
    int totcred;
    int mks[];
    int gp[];
    float sgpa;
    void compute()
    {
        mks = new int[n];
        gp = new int[n];
        total = 0;
        totcred = 0;
        for(i = 0; i < n; i++)
        {
            mks[i] = (see[i] / 2) + cie[i];
            if (mks[i] >= 90 && mks[i] <= 100)
                gp[i] = 10;
```

```java
 85              else if (mks[i] >= 80)
 86                  gp[i] = 9;
 87              else if (mks[i] >= 70)
 88                  gp[i] = 8;
 89              else if (mks[i] >= 60)
 90                  gp[i] = 7;
 91              else if (mks[i] >= 50)
 92                  gp[i] = 5;
 93              else if (mks[i] >= 40)
 94                  gp[i] = 4;
 95              else
 96                  gp[i] = 0;
 97          }
 98
 99          for(i = 0; i < n; i++)
100          {
101              total += ((float)gp[i] * cred[i]);
102              totcred += cred[i];
103          }
104          sgpa = (total / totcred);
105
106          System.out.println("Student USN : "+usn);
107          System.out.println("Student NAME : "+name);
108          System.out.println("Student SEMESTER : "+sem);
109          System.out.println("Student SGPA : "+sgpa);
110          System.out.println("\n<---------------------------------->\n");
111      }
112  }
112  }
113  |
114  class Studentmain
115  {
116      public static void main(String[] args)
117      {
118          Scanner ss = new Scanner(System.in);
119          System.out.println("\nEnter the number of students :");
120          int n = ss.nextInt();
121          Result s[] = new Result[n];
122          for(int i=0;i<n;i++)
123          {
124              s[i]=new Result();
125              s[i].accept1();
126              s[i].accept2();
127              s[i].accept3();
128          }
129          for(int i=0;i<n;i++)
130          {
131              System.out.println("\n<----------STUDENT "+(i+1)+" DETAILS---------->\n");
132              s[i].compute();
133          }
134      }
135  }
```

OUTPUT :

```
Command Prompt                                                    —    □    X

C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_7>java Studentmain

Enter the number of students :
2

<-----ENTER THE BASIC STUDENT DETAILS----->

Enter the Student USN :
111
Enter the Student NAME :
Shyam
Enter the SEMESTER of the Student :
3

<------------------------------------------>

Enter the number of subjects : 2

Enter the Credits and CIE Marks in each of the 2 Subjects :

Enter the Credits of Subject 1 : 4
Enter the CIE Marks scored in Subject 1 : 48

Enter the Credits of Subject 2 : 5
Enter the CIE Marks scored in Subject 2 : 49


Enter the corresponding SEE marks of each of the 2 Subjects :
```

```
Enter the SEE Marks scored in Subject 1 : 96
Enter the SEE Marks scored in Subject 2 : 95

<-----ENTER THE BASIC STUDENT DETAILS----->

Enter the Student USN :
222
Enter the Student NAME :
Ram
Enter the SEMESTER of the Student :
3

<----------------------------------------->

Enter the number of subjects : 2

Enter the Credits and CIE Marks in each of the 2 Subjects :

Enter the Credits of Subject 1 : 4
Enter the CIE Marks scored in Subject 1 : 42

Enter the Credits of Subject 2 : 5
Enter the CIE Marks scored in Subject 2 : 45

Enter the corresponding SEE marks of each of the 2 Subjects :

Enter the SEE Marks scored in Subject 1 : 90
Enter the SEE Marks scored in Subject 2 : 75
```

```
<----------STUDENT 1 DETAILS---------->

Student USN : 111
Student NAME : Shyam
Student SEMESTER : 3
Student SGPA : 10.0

<---------------------------------->


<----------STUDENT 2 DETAILS---------->

Student USN : 222
Student NAME : Ram
Student SEMESTER : 3
Student SGPA : 9.0

<---------------------------------->


C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_7>
```

PROGRAM 2 :

INPUT :

File Edit Selection Find View Goto Tools Project Preferences Help

login.html   styles.css   cse.html   Studentmain.java   **Playermain.java**   Student.java   cse.css   ss_styles.css

```java
import java.util.Scanner;

class PLAYER
{
    String name;
    int matches_played;
    double average;
    void accept1()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter the NAME :");
        name = ss.next();
        System.out.println("Enter the NUMBER OF MATCHES played : ");
        matches_played = ss.nextInt();
    }
}

class BATSMAN extends PLAYER
{
    int runs_scored;
    void accept2()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter the NUMBER OF RUNS SCORED : ");
        runs_scored = ss.nextInt();
        average = (double)(runs_scored) / matches_played;
        System.out.println("\n-----The AVERAGE RUNS SCORED by the batsman is : "+average+"------\n");
    }
}

class BOWLER extends PLAYER
{
    int runs_given;
    int runs_given_sum = 0;
    void accept3()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter the NUMBER OF RUNS GIVEN away : ");
        runs_given = ss.nextInt();
        average = (double)(runs_given) / matches_played;
        System.out.println("\n----The AVERAGE RUNS GIVEN AWAY by the bowler is : "+average+"------\n");
    }
}

class Playermain
{
    public static void main(String[] args)
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("\nEnter the number of BATSMEN :");
        int m = ss.nextInt();
        System.out.println("Enter the number of BOWLERS :");
        int n = ss.nextInt();
        BATSMAN bat[] = new BATSMAN[m];
        System.out.println("\n<------ENTER BATSMEN DETAILS------>\n");
        for(int i=0;i<m;i++)
        {
            bat[i] = new BATSMAN();
            bat[i].accept1();
            bat[i].accept2();
        }
        BOWLER bowl[] = new BOWLER[n];
        System.out.println("\n<------ENTER BOWLERS DETAILS------>\n");
        for(int i=0;i<n;i++)
        {
            bowl[i] = new BOWLER();
            bowl[i].accept1();
            bowl[i].accept3();
        }
    }
}
```

OUTPUT :

```
Command Prompt                                                    —    □    X

C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_7>java Playermain

Enter the number of BATSMEN :
2
Enter the number of BOWLERS :
1

<------ENTER BATSMEN DETAILS------>

Enter the NAME :
Dhoni
Enter the NUMBER OF MATCHES played :
200
Enter the NUMBER OF RUNS SCORED :
20000

-----The AVERAGE RUNS SCORED by the batsman is : 100.0------

Enter the NAME :
Virat
Enter the NUMBER OF MATCHES played :
175
Enter the NUMBER OF RUNS SCORED :
18375

-----The AVERAGE RUNS SCORED by the batsman is : 105.0------

<------ENTER BOWLERS DETAILS------>
```

```
Command Prompt                                                    —    □    X

<------ENTER BOWLERS DETAILS------>

Enter the NAME :
Yuzi
Enter the NUMBER OF MATCHES played :
50
Enter the NUMBER OF RUNS GIVEN away :
555

----The AVERAGE RUNS GIVEN AWAY by the bowler is : 11.1------

C:\Users\91944\OneDrive\Desktop\OOJLAB\Lab_7>
```