

LAB PROGRAM – 2

Q. Develop a Java program to create a class Student with members usn, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

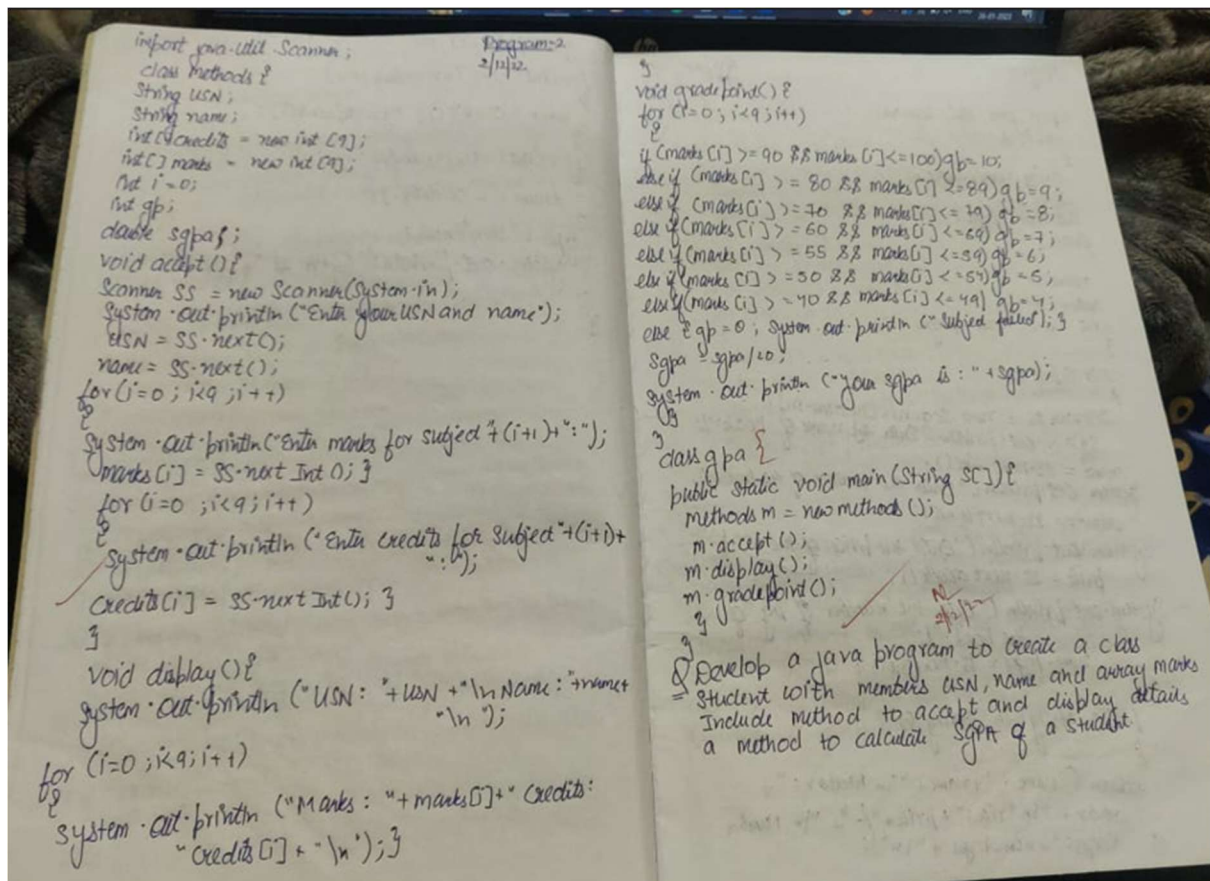
```
import java.util.Scanner;
class student{
void display(String name, String usn)
{
System.out.println("USN of the student "+usn);
    System.out.println("Name of the student "+ name);
}
void calculategpa(double[] marks, double[] credits, int number)
{
double gradepoints[]=new double[number];
double sgpa,sum=0,tsum=0;
for (int i=0;i<number;i++)
{
if(marks[i]>=90)
gradepoints[i]=10;
else if(marks[i]>=80)
gradepoints[i]=9;
else if(marks[i]>=70)
gradepoints[i]=8;
else if(marks[i]>=60)
gradepoints[i]=7;
else if(marks[i]>=50)
gradepoints[i]=6;
else if(marks[i]>=40)
gradepoints[i]=4;
else
gradepoints[i]=0;
}
for(int i=0;i<number;i++)
{
sum+=credits[i]*gradepoints[i];
}
for(int i=0;i<number;i++)
{
tsum+=credits[i];
}
sgpa=sum/tsum;
System.out.println("SGPA is "+sgpa);
}
}

class sgpa{
public static void main(String args[]){
Scanner s=new Scanner(System.in);
System.out.println("Enter name and usn of student");
```

```

String name=s.next();
String usn=s.next();
student s1=new student();
System.out.println("Enter the number of courses");
int number=s.nextInt();
double credits[]=new double[number];
double marks[]=new double[number];
for(int i=0;i<number;i++)
{
    System.out.print("Credit of subject "+(i+1) + " : ");
    credits[i]=s.nextDouble();
    System.out.print("Marks of subject "+(i+1) + " : ");
    marks[i]=s.nextDouble();
}
s1.display(name,usn);
s1.calculatesgpa(marks,credits,number);
}
}

```



Output for program

Enter your name

Akashka

Enter your USN

1bm2kcs012

Enter the marks of each subject

89

90

95

67

89

Enter the number of credits

4

3

2

4

4

Name : Akashka

USN : 1bm2kcs012

Marks of each subject is 89

number of credits for each subject 1 = 4

Mark of each subject is 90

number of credits for each subject 2 = 3

Marks of each subject is 95

number of credits for each subject 3 = 2

Marks of each subject is 67

number of credits for each subject = 4

Marks of each subject is 89

number of credits for each subject = 4

sgpa = 9.235

Enter credits for subject 5:

2

Enter credits for subject 6:

6

Enter credits for subject 7:

1

Enter credits for subject 8:

1

Enter credits for subject 9:

1

USN: 1bmcs012

Name :akansha

Marks: 90 Credits: 1

Marks: 89 Credits: 4

Marks: 99 Credits: 3

Marks: 67 Credits: 2

Marks: 78 Credits: 2

Marks: 98 Credits: 6

Marks: 100 Credits: 1

Marks: 98 Credits: 1

Marks: 78 Credits: 1