OOJ LAB WEEK 2
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PROGRAM

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.

CODE

```java
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 calculatesgpa(double[] marks, double[] credits, int number)

{

double gradepoints[]=new double[number];

double sgpa,sum=0,tnum=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;
```

```java
else
gradepoints[i]=0;
}
for(int i=0;i<number;i++)
{
sum+=credits[i]*gradepoints[i];
}
for(int i=0;i<number;i++)
{
tnum+=credits[i];
}
sgpa=sum/tnum;
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();
```
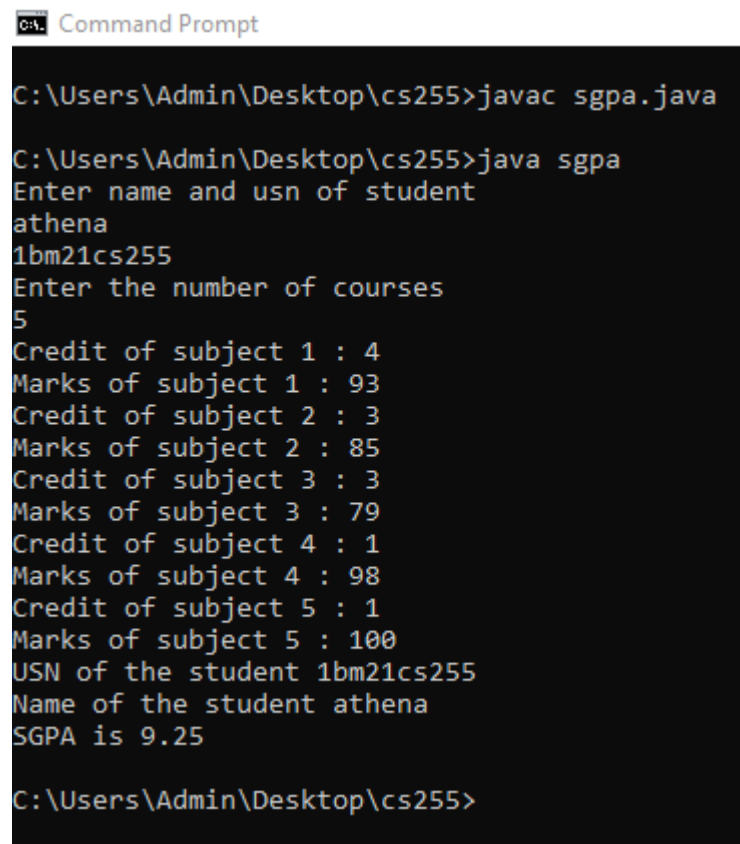
```
System.out.print("Marks of subject "+(i+1) +" : ");

marks[i]=s.nextDouble();

}

s1.display(name,usn);

s1.calculatesgpa(marks,credits,number);

}

}
```

OUTPUT

```
C:\Users\Admin\Desktop\cs255>javac sgpa.java

C:\Users\Admin\Desktop\cs255>java sgpa
Enter name and usn of student
athena
1bm21cs255
Enter the number of courses
5
Credit of subject 1 : 4
Marks of subject 1 : 93
Credit of subject 2 : 3
Marks of subject 2 : 85
Credit of subject 3 : 3
Marks of subject 3 : 79
Credit of subject 4 : 1
Marks of subject 4 : 98
Credit of subject 5 : 1
Marks of subject 5 : 100
USN of the student 1bm21cs255
Name of the student athena
SGPA is 9.25

C:\Users\Admin\Desktop\cs255>
```