Lab Program 2

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.

Source Code:

```java
import java.util.*;

class Student{

String usn,name;

Scanner sc = new Scanner(System.in);

Student(){

System.out.println("Enter your USN");

usn=sc.next();

System.out.println("Enter your Name");

name=sc.next();

}

int marks[]=new int[50];

int credits[]=new int[50];

int sum1=0;

int sum2=0;

void markenter(int x)

{

for (int i=0;i<x;i++){

System.out.println("Enter the marks in subject "+i+": ");

marks[i]=sc.nextInt();
```

```java
System.out.println("Enter the credits in subject "+i+": ");

credits[i]=sc.nextInt();

sum1+=credits[i];

if (marks[i]>=90){

marks[i]=10;

}

else if (marks[i]>=80 && marks[i]<90)

{

marks[i]=9;

}

else if (marks[i]>=70 && marks[i]<80)

{

marks[i]=8;

}

else if (marks[i]>=60 && marks[i]<70)

{

marks[i]=7;

}

else if(marks[i]>=50 && marks[i]<60)

{

marks[i]=6;

}

else if(marks[i]>=40 && marks[i]<50)

{

marks[i]=5;

}
```

```java
else
{
marks[i]=0;
}
}
}
double calc(int z)
{
for (int f=0;f<z;f++){
sum2+=marks[f]*credits[f];

}
return (sum2/sum1);
}
}
class SGPA{
public static void main(String args[]){
Student stud=new Student();
Scanner sc= new Scanner(System.in);
System.out.println("Enter the number of subjects");
 int n=sc.nextInt();
stud.markenter(n);
System.out.println("SGPA scored is "+ stud.calc(n) );
}
}
```

Output:

```
C:\Windows\System32\cmd.e    ×    +    ∨

C:\Javaprog>java SGPA
Enter your USN
1BM21CS092
Enter your Name
Krishn
Enter the number of subjects
3
Enter the marks in subject 0:
38
Enter the credits in subject 0:
1
Enter the marks in subject 1:
99
Enter the credits in subject 1:
4
Enter the marks in subject 2:
78
Enter the credits in subject 2:
2
SGPA scored is 8.0

C:\Javaprog>java SGPA
Enter your USN
1BM21CS409
Enter your Name
Pablo
Enter the number of subjects
2
Enter the marks in subject 0:
78
Enter the credits in subject 0:
4
Enter the marks in subject 1:
34
Enter the credits in subject 1:
4
SGPA scored is 4.0

C:\Javaprog>
```