

```
import java.util.Scanner;

class Student
{
    String usn,name;
    int n;
    int marks[];
    int credits[];

    void inputMarks()
    {
        Scanner input=new Scanner(System.in);
        System.out.print("Enter USN: ");
        usn=input.nextLine();
        System.out.print("Enter Name: ");
        name=input.nextLine();
        System.out.print("Enter number of subjects: ");
        n=input.nextInt();
        credits=new int[n];
        marks=new int[n];

        for(int i=0;i<n;i++)
        {
            System.out.print("\nEnter marks of subject "+(i+1)+" : ");
            marks[i]=input.nextInt();
            System.out.print("\nEnter credits of subject "+(i+1)+" : ");
            credits[i]=input.nextInt();
        }

    }

    int gradePoints(int marks)
```

```
{  
if(marks>=90)  
return 10;  
else if(marks>=80)  
return 9;  
else if(marks>=70)  
return 8;  
else if(marks>=60)  
return 7;  
else if(marks>=50)  
return 6;  
else  
return 0;  
}
```

```
double sgpa()  
{  
double totalcredits=0,sum=0;  
  
for(int i=0;i<n;i++)  
{  
totalcredits=totalcredits+credits[i];  
sum=sum+gradePoints(marks[i])*credits[i];  
}  
  
return (sum/totalcredits);  
}
```

```
void display()  
{  
System.out.println("USN: "+usn);
```

```
System.out.println("Name: "+name);
}
}

class SGPA
{
public static void main(String[] args)
{
Student student=new Student();
student.inputMarks();
student.display();
System.out.println("SGPA: "+student.sgpa());
}
}
```

OUTPUT:

Enter USN: 1BM22CS078

Enter Name: Charan G

Enter number of subjects: 8

Enter marks of subject 1 : 99

Enter credits of subject 1 : 4

Enter marks of subject 2 : 98

Enter credits of subject 2 : 4

Enter marks of subject 3 : 94

Enter credits of subject 3 : 3

Enter marks of subject 4 : 91

Enter credits of subject 4 : 3

Enter marks of subject 5 : 87

Enter credits of subject 5 : 1

Enter marks of subject 6 : 94

Enter credits of subject 6 : 3

Enter marks of subject 7 : 92

Enter credits of subject 7 : 1

Enter marks of subject 8 : 98

Enter credits of subject 8 : 1

USN: 1BM22CS078

Name: Charan G

SGPA: 9.95