

```

import java.util.*;

class student
{
String name;
String usn;
int marks[]=new int[5];
int credits[]=new int[5];
void input()
{
System.out.println("\nenter the name of the student");
System.out.println("\nenter the usn of the student");
Scanner sc=new Scanner(System.in);
name=sc.nextLine();
usn=sc.nextLine();
System.out.println("\nenter the marks and credits of the students");
for(int i=0;i<5;i++)
{
marks[i]=sc.nextInt();
credits[i]=sc.nextInt();
}}
void output()
{
System.out.println("name :"+ " "+name+"\nUSN :"+ " "+usn);
for(int i=0;i<5;i++)
{
System.out.println("marks of subject"+ " "+(i+1)+"="+marks[i]);
System.out.println("credits of subject"+ " "+(i+1)+"="+credits[i]);
}}
void cgpa()
{
float s_gpa=0;

```

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int sum=0;
int credit[]=new int[5];
for(int i=0;i<5;i++)
{
    if(marks[i]>=90)
    {
        credit[i]=10;
    }
    else if(marks[i]>=80)
    {
        credit[i]=9;
    }
    else if(marks[i]>=70)
    {
        credit[i]=8;
    }
    else if(marks[i]>=60)
    {
        credit[i]=7;
    }
    else if(marks[i]>=50)
    {
        credit[i]=6;
    }
    else if(marks[i]>=35)
    {
        credit[i]=5;
    }
    else if(marks[i]<35)
    {
        credit[i]=0;
```

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}  
else  
{  
System.out.println("invalid input");  
}  
  
s_gpa+=(credit[i]*credits[i]);  
sum=sum+credits[i];  
}  
float res =s_gpa/sum;  
System.out.println("SGPA="+ " "+res);  
}}  
class sgpa  
{  
public static void main(String args[]){  
student vj=new student();  
vj.input();  
vj.output();  
vj.cgpa();  
}}
```

Command Prompt

```
enter the name of the student
enter the usn of the student
Vedang
1BM21CS239

enter the marks and credits of the stuent
70
4
80
3
73
2
74
3
87
1
name : Vedang
USN : 1BM21CS239
marks of subject 1 =70
credits of subject 1 =4
marks of subject 2 =80
credits of subject 2 =3
marks of subject 3 =73
credits of subject 3 =2
marks of subject 4 =74
credits of subject 4 =3
marks of subject 5 =87
credits of subject 5 =1
SGPA= 8.307693
```