JAVA CODE TO CALCULATE SGPA

```java
import java.util.*;

class student {
    String usn;
    int marks[]=new int[5];
    int credits[]= new int[5];
    String name;

    void input() {
        System.out.println("Enter the usn:");
        Scanner sc = new Scanner(System.in);
        usn=sc.next();
        System.out.println("Enter the name:");
        name=sc.nextLine();
        String usn =sc.nextLine();
        System.out.println("Enter the marks of each subject");
            for(int i=0;i<5;i++)
            {
                marks[i]=sc.nextInt();
            }
```

```java
        System.out.println("Enter the credits of each subject");
            for(int i=0;i<5;i++)
            {
                credits[i]=sc.nextInt();
            }
            }
        void output()
        {
            System.out.println("Name: "+name);
            System.out.println("USN: "+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()
        {
            int cred[]= new int[5];
            int sgpa=0;
```

```
int sum=0;
float res;
    for(int i=0;i<5;i++)
     {
            if(marks[i]>=90)
                    cred[i]=10;
            else if(marks[i]>=80)
                    cred[i]=9;
            else if(marks[i]>=70)
                    cred[i]=8;
            else if(marks[i]>=60)
                    cred[i]=7;
            else if(marks[i]>=50)
                    cred[i]=6;
            else if(marks[i]>=40)
                    cred[i]=5;
            else if(marks[i]>=35)
                    cred[i]=4;
            else if(marks[i]<35 && marks[i]>=0)
                    cred[i]=0;
            else
```

```java
                            System.out.println("Invalid marks");

                        sgpa+=(cred[i]*credits[i]);

                        sum+=credits[i];

                    }

                res=(float)sgpa/sum;

                System.out.println("SGPA = "+res);

            }

    }

    class sgpa {

        public static void main(String args[]) {

            student kp = new student();

                kp.input();

                kp.output();

                kp.cgpa();

        }

    }
```

OUTPUT

```
Enter the usn:
1bm21cs232
Enter the name:
kenny
Enter the marks of each subject
30
45
75
68
90
Enter the credits of each subject
3
3
2
1
1
Name:
USN: 1bm21cs232
Marks of subject_1 = 30
credits of subject_1 = 3
Marks of subject_2 = 45
credits of subject_2 = 3
Marks of subject_3 = 75
credits of subject_3 = 2
Marks of subject_4 = 68
credits of subject_4 = 1
Marks of subject_5 = 90
credits of subject_5 = 1
SGPA = 4.8
```