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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

```
import java.util.Scanner;
class student
{
	String usn,name;
	int cred[]=new int [5];
	int marks[]=new int [5];

	Scanner sc=new Scanner(System.in);
	void accept()
	{
		System.out.println("Enter usn of the student:");
		usn=sc.next();
		System.out.println("Enter the name of the student:");
		name=sc.next();
		System.out.println("Enter the credits:");
		for(int i=0;i<5;i++)
		{
			cred[i]=sc.nextInt();
		}
		System.out.println("Enter the marks:");
		for(int i=0;i<5;i++)
```

```
        {
                marks[i]=sc.nextInt();
        }
}
void display()
{
        System.out.println("Name: "+name);
        System.out.println("Usn: "+usn);
        System.out.println("Credits: ");
        for(int i=0;i<5;i++)
        {
                System.out.println(cred[i]);
        }
        System.out.println("Marks: ");
        for(int i=0;i<5;i++)
        {
                System.out.println(marks[i]);
        }
}
float calc_sgpa()
{
        int sum=0;
        float p=0;
        float gpa;
        int g[]=new int[5];
        for(int i=0;i<5;i++)
```

```
{
        sum=sum+cred[i];
        if(marks[i]>90 && marks[i]<=100)
        {
                p=p+(cred[i]*10);
        }
        else if(marks[i]>80 && marks[i]<=90)
        {
                p=p+(cred[i]*9);
        }
        else if(marks[i]>70 && marks[i]<=80)
        {
                p=p+(cred[i]*8);
        }
        else if(marks[i]>60 && marks[i]<=70)
        {
                p=p+(cred[i]*7);
        }
        else if(marks[i]>50 && marks[i]<=60)
        {
                p=p+(cred[i]*6);
        }
        else if(marks[i]>40 && marks[i]<=50)
        {
                p=p+(cred[i]*5);
        }
```

```
                else
                {
                        p=p+(cred[i]*0);
                }

        }
        gpa=p/20;
        return(gpa);
    }
}

class program
{
    public static void main(String args[])
    {
        float sgpa;
        student s1=new student();
        s1.accept();
        s1.display();
        sgpa=s1.calc_sgpa();
        System.out.println("SGPA: "+sgpa);

    }
}
```

Output:

```
C:\Users\Admin\Desktop\1bm21cs242>java program
Enter usn of the student:
1bm21cs242
Enter the name of the student:
abc
Enter the credits:
3
3
4
5
5
Enter the marks:
100
81
77
65
56
Name: abc
Usn: 1bm21cs242
Credits:
3
3
4
5
5
Marks:
100
81
77
65
56
SGPA: 7.7

C:\Users\Admin\Desktop\1bm21cs242>
```