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import java.util.*;
class Student
{
    String usn;
    String name;
    private int n,credits[],marks[],gp[];
    double sum,sgpa;

    Student()
    {
        name="xyz";
        usn="0";
    }

    void accept()
    {
        Scanner s1=new Scanner(System.in);
        System.out.println("Enter the usn and name");
        usn=s1.next();
        name=s1.next();
        System.out.println("Enter number of subjects");
        n=s1.nextInt();
        credits=new int[n+1];
        marks=new int[n+1];
        System.out.println("Enter the credits and marks in each subject");
        for(int i=1;i<=n;i++)
        {
            System.out.println("Enter the credits and marks in subject "+i);
            credits[i]=s1.nextInt();
            marks[i]=s1.nextInt();
        }
    }

    void calculate()
    {
        gp=new int[n+1];
        int a=0;
        for(int i=1;i<=n;i++)
        {
            if(marks[i]>=90)
                gp[i]=10;
            if(marks[i]>=80&&marks[i]<90)
                gp[i]=9;
            if(marks[i]>=70&&marks[i]<80)
                gp[i]=8;
            if(marks[i]>=60&&marks[i]<70)
                gp[i]=7;
            if(marks[i]>=50&&marks[i]<60)
                gp[i]=5;
        }
    }
}
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if(marks[i]<40)
gp[i]=0;
sum=(double)(credits[i]*gp[i])+sum;
a=a+credits[i];
}
sgpa=sum/a;
}
void display()
{
System.out.println("usn:"+usn+"   name:"+name);
for (int i=1;i<=n;i++)
System.out.println("marks:"+marks[i]+"   grade points:"+gp[i]);
System.out.println("sgpa:"+sgpa);
}
}
class STudentmain
{
public static void main(String[] args)
{
Student sc=new Student();
sc.accept();
sc.calculate();
sc.display();
}
}

```

```

C:\Users\Ajith\Desktop\java program>javac studentt.java
C:\Users\Ajith\Desktop\java program>java STudentmain
Enter the usn and name
1bm19cs010
ajith
Enter number of subjects
3
Enter the credits and marks in each subject
Enter the credits and marks in subject 1
4
67
Enter the credits and marks in subject 2
4
76
Enter the credits and marks in subject 3
4
82
usn:1bm19cs010 name:ajith
marks:67   grade points:7
marks:76   grade points:8
marks:82   grade points:9
sgpa:8.0
C:\Users\Ajith\Desktop\java program>

```