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import java.util.Scanner;

class Student
{
    private String usn,name;
    private int n,i,grdpts,sum,credits_sum;
    private float sgpa;
    int credits[];
    double marks[];
    Student()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number of subjects");
        n=sc.nextInt();
        credits=new int[n];
        marks=new double[n];
        sum=0;
        credits_sum=0;
    }
    void accept()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter USN and name");
        usn=sc.next();
        name=sc.next();
        for(i=0;i<n;i++)
        {
            System.out.println("Enter "+(i+1)+" subject's marks and credits");
            marks[i]=sc.nextDouble();
            credits[i]=sc.nextInt();
        }
    }
}
```

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    }
}
void cal()
{
    for(i=0;i<n;i++)
    {
        if(marks[i]==100)
            grdpts=10;
        else if(marks[i]>=60 && marks[i]<100)
            grdpts=((int)(marks[i]/10))+1;
        else if(marks[i]>=40 && marks[i]<60)
            grdpts=(int)(marks[i]/10);
        else if(marks[i]<40)
            grdpts=0;
        sum=sum+(grdpts*credits[i]);
    }
    for(i=0;i<n;i++)
    {
        credits_sum=credits_sum+credits[i];
    }
    sgpa=(float)sum/credits_sum;
}
void display()
{
    System.out.println("Student details:");
    System.out.println("Name: "+name);
    System.out.println("USN: "+usn);
    System.out.printf("SGPA: %.2f",sgpa);
}

```

```
}  
  
class StudentMain  
{  
    public static void main(String args[])  
    {  
        Student s = new Student();  
        s.accept();  
        s.cal();  
        s.display();  
    }  
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java StudentMain  
Enter the number of subjects  
6  
Enter USN and name  
1BM19CS005  
Adithi  
Enter 1 subject's marks and credits  
80  
7  
Enter 2 subject's marks and credits  
98.7  
5  
Enter 3 subject's marks and credits  
89  
2  
Enter 4 subject's marks and credits  
89  
4  
Enter 5 subject's marks and credits  
100  
8  
Enter 6 subject's marks and credits  
78  
6  
Student details:  
Name: Adithi  
USN: 1BM19CS005  
SGPA: 9.22  
C:\Users\Adithi\Desktop\java_prgs>
```