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import java.util.*;
class Student {
    private String usn;
    private String name;
    private int cred[];
    private int marks[];
    private int n;

    void accept()
    {
        Scanner s=new Scanner(System.in);
        System.out.println("Enter student details");
        System.out.println("USN of the student:");
        usn=s.next();
        System.out.println("Name of student:");
        name=s.next();
        System.out.println("Enter the number of subjects:");
        n=s.nextInt();
        cred=new int[n];
        marks=new int[n];
        System.out.println("Enter credits and marks attained by the student in each
subject(out of 100)");
        for(int i=0;i<n;i++)
        {
            cred[i]=s.nextInt();
            marks[i]=s.nextInt();
        }
    }
    void display()
    {
        System.out.println("Student details:");
        System.out.println("USN:"+usn);
        System.out.println("Name:"+name);
        System.out.println("Marks in each subject:");
        for(int i=0;i<n;i++)
        {
            System.out.println("Subject "+(i+1)+": "+marks[i]);
        }
    }
    double calculate()
    {
        int tcp=0,tc=0;
        for(int i=0;i<n;i++)
        {
            tc=tc+cred[i];
            if(marks[i]>=50)
            {
                tcp=tcp+(((marks[i]/10)+1)*cred[i]);
            }
            else if(marks[i]>=40 && marks[i]<50)
            {

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        tcp=tcp+(4*cred[i]);
    }
    }
    return (double)tcp/tc;
}

class Main
{

    public static void main(String ss[]) {
        Student s1=new Student();
        s1.accept();
        s1.display();
        System.out.println("SGPA: "+s1.calculate());
    }
}

```

```

Enter student details
USN of the student:
1BM19CS088
Name of student:
PARJANYA
Enter the number of subjects:
4
Enter credits and marks attained by the student in each subject(out of 100)
3
90
4
87
5
77
4
67
Student details:
USN:1BM19CS088
Name:PARJANYA
Marks in each subject:
Subject 1:90
Subject 2:87
Subject 3:77
Subject 4:67
SGPA: 8.375

...Program finished with exit code 0
Press ENTER to exit console.

```