

```
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 ("Us N of 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 tp = 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)
        {

```

```

            tcp = tcp + (4 * cred[i]);
        }

```

```

        return (double) tcp / tc;
    }
}

```

```

class Main

```

```

{
    public static void main (String args[])
    {

```

```

        Student s1 = new Student(1);

```

```

        s1.accept();

```

```

        s1.display();
    }
}

```


System.out.println("SGPA : " + s1.calculate());
}

}