```java
import java.util.*;
class Student {
    String name;
    String USN;
    int[] credits;
    int[] marks;
    Scanner sc = new Scanner(System.in);

    void getDetails() {
        System.out.print("Enter the Name:");
        name = sc.next();
        System.out.print("Enter the USN:");
        USN = sc.next();
        System.out.print("Enter the number of subjects:");
        int n = sc.nextInt();
        credits = new int[n];
        marks = new int[n];
        for (int i = 0; i < n; i++) {
            System.out.print("Enter the credits for:" + (i+1) + "Subject:");
            credits[i] = sc.nextInt();
            System.out.print("Enter the marks for:" + (i+1) + "Subject:");
            marks[i] = sc.nextInt();
        }
    }

    void showDetails() {
        System.out.println("Name: " + name);
        System.out.println("USN: " + USN);
        for (int i = 0; i < credits.length; i++) {
            System.out.println("Marks:" + i + "th Subject:" + marks[i]);
            System.out.println("Credits:" + i + "th Subject:" + credits[i]);
        }
    }

    double SGPACalc() {
        double sgpa=0;
        int total_Credits=0;
        for (int i = 0; i < credits.length; i++) {
            sgpa += (marks[i]/10)* credits[i];
            total_Credits += credits[i];
        }
```

```java
        return sgpa/total_Credits;
    }
}
class StudentSPGA{
    public static void main(String[] args) {
        Student s= new Student();
        s.getDetails();
        s.showDetails();
        System.out.println("SGPA:"+s.SGPACalc());
    }
}
```

```
Enter the Name:Shreyas
Enter the USN:1BM23CS321
Enter the number of subjects:3
Enter the credits for:1Subject:2
Enter the marks for:1Subject:70
Enter the credits for:2Subject:3
Enter the marks for:2Subject:80
Enter the credits for:3Subject:4
Enter the marks for:3Subject:90
Name: Shreyas
USN: 1BM23CS321
Marks:0th Subject:70
Credits:0th Subject:2
Marks:1th Subject:80
Credits:1th Subject:3
Marks:2th Subject:90
Credits:2th Subject:4
SGPA:8.222222222222221
```

Java program to create class student with members USN, Name, an array of credits, an array of marks. Include methods to accept and display details and calculate SGPA of a student.

```java
import java.util.scanner;
class Student {
    string usn, name;
    int [] credits;
    int [] marks;
    void get () {
        Scanner sc = new Scanner (System.in);
        System.println ("Enter USN:");
        USN = sc.nextline();
        System.out.println ("Enter Name");
        name = sc.nextline();
        System.out.println ("Enter number of sub:");
        int num = sc.nextInt();
        credits = new Int [num];
        marks = new Int [num];
        for (int i=0; i<num; i++) {
            System.out.println ("Enter credits for
                                    subject" + (i+1));
            credits [i] = sc.nextInt();
            System.println ("Enter marks for
                                    same subject");
            marks [i] = sc.nextInt();
        }
    }
}
```

```java
        void display () {
            System.out.println ("USN : " + usn);
            System.out.println (" Name:" + name);
            for (int i= 0 ; i < credits.length ; i++) {
                System.out.println ("subject " + (i+1) +
                    " Credits :" )
            }
        }

    double calcSGPA () {
        double sgpa = 0;
        int totalCredits = 0;
        for (int i= 0 ; i < credit.length ; i++ ) {
            sgpa += (marks [i] / 10) * credit
            totalCredits += credits [i] ;
        }
        return sgpa / Total credits ;
    }

    Class StudentSGPA {
        public static void main (String [] args);
            Student s = new Student ();
            s. get ();
            s. display () ;
            System.out.println ("SGPA : " + s.calcSGPA());
    }
}
```

Output ⇒

Enter USN : Shreyas Sinha
Enter Name : 1BM23CS321
Enter number of subjects : 3
Credits for subject 1 : 2
Marks : 70
Credits for subject 2 : 3
Marks : 80
Credits for subject 3 : 4
Marks : 90

USN : 1BM23CS321
Name : Shreyas Sinha
Subject 1 - Credits : 2   Marks : 70
Subject 2 - Credits : 3   Marks : 80
Subject 3 - Credits : 4   Marks : 90

SGPA : 8.22