**Lab Program 2:**

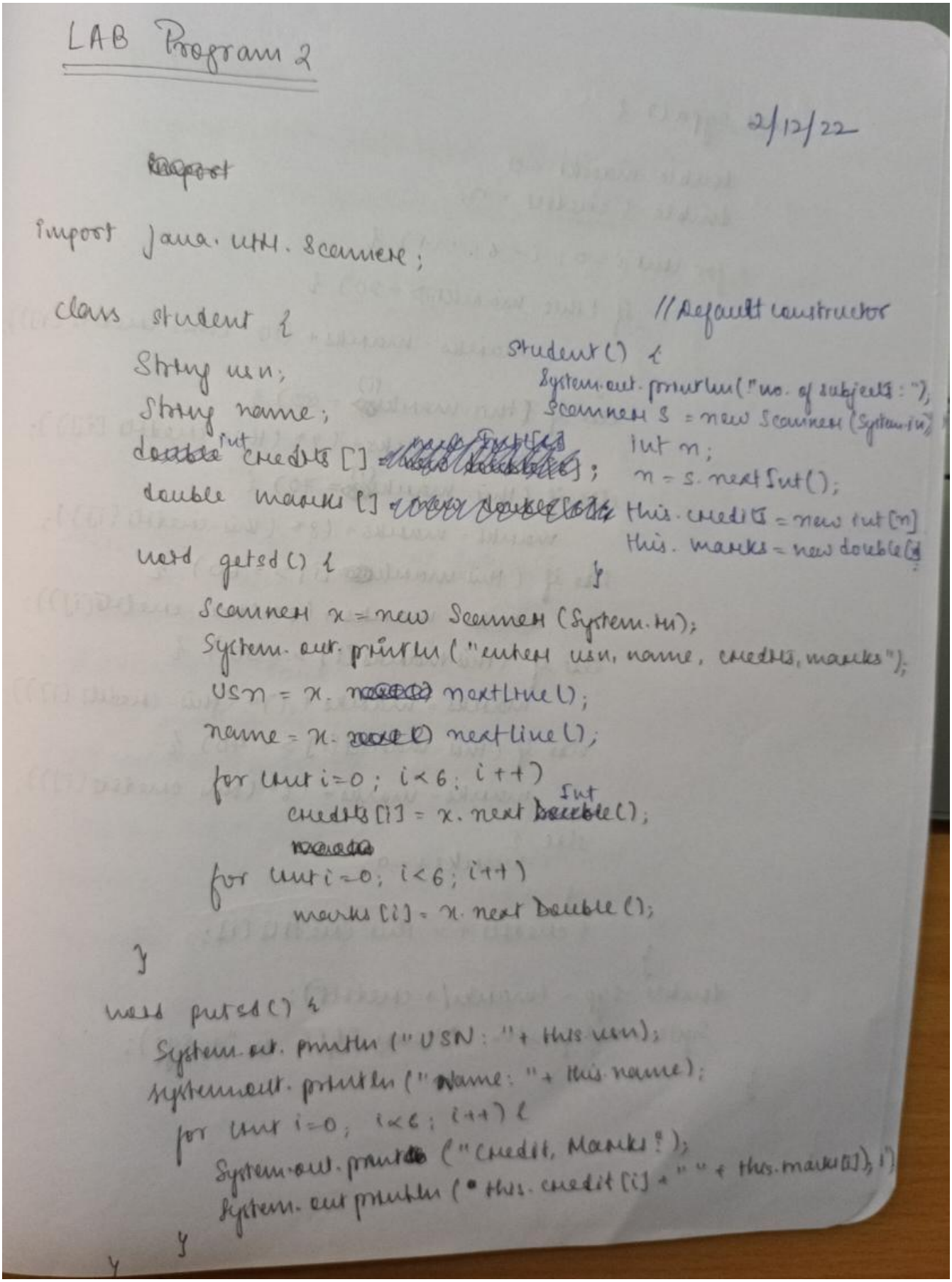
**Develop a Java program to create a class Student with members usn, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.**

**OUTPUT:**

```
C:\Users\anosh\OneDrive\Desktop\java practice>javac smain.java

C:\Users\anosh\OneDrive\Desktop\java practice>java smain
Enter no. of subjects:
6
enter usn, name, credits, marks for subjects
1BM21CS024
Anoshor B Paul
1 2 2 3 3 4
85
92
75
87
90
93
USN: 1BM21CS024
Name: Anoshor B Paul
Marks:
85.0 92.0 75.0 87.0 90.0 93.0
Credits:
1 2 2 3 3 4
Your SGPA is: 9.466666666666667
```

**WRITTEN CODE:**



LAB Program 2

2/12/22

```
import java.util.Scanner;

class student {
    String usn;
    String name;
    int credits[];
    double marks[];

    void getstd() {
        Scanner x = new Scanner(System.in);
        System.out.println("enter usn, name, credits, marks");
        usn = x.nextLine();
        name = x.nextLine();
        for(int i=0; i<6; i++)
            credits[i] = x.nextInt();
        for(int i=0; i<6; i++)
            marks[i] = x.nextDouble();
    }

    void putstd() {
        System.out.println("USN: "+ this.usn);
        System.out.println("Name: "+ this.name);
        for(int i=0; i<6; i++) {
            System.out.println("Credit, Marks: ");
            System.out.println(" this.credit[i] + " " + this.marks[i]);
        }
    }
}
```

```
//Default constructor
Student() {
    System.out.println("no. of subjects: ");
    Scanner s = new Scanner(System.in);
    int n;
    n = s.nextInt();
    this.credits = new int[n]
    this.marks = new double[n];
}
```

```
class smain {

    public static void main (String ss[])

        Student S1 = new Student();
            S1. getsd();
            S1. putsd();
            S1. sgpa();
        }
}
```

Test case: Enter no. of subjects
> 6
1BM21CS024
Anushor B Paul
1 2 2 3 3 4
88 88 90 76 70 99

USN: 1BM21CS024
Name: Anushor B. Paul
Marks: 88.0 88.0 90.0 76.0 70.0 99.0
Credits: 1 2 2 3 3 4

Your SGPA is: 9.0

```
void sgpa() {

    double marks = 0
    double t_credits = 0;

    for (int i = 0; i < 6; i++) {

        if (this.marks[i] >= 90) {

            marks = marks + (10 * (this.credits[i]));
        }
        else if (this.marks[i] >= 80) {
            marks = marks + (9 * (this.credits[i]));
        else if (this.marks[i] >= 70) {
            marks = marks + (8 * (this.credits[i]));
        else if (this.marks[i] >= 60) {
            marks = marks + (8 * (this.credits[i]));
        else if (this.marks[i] >= 50) {
            marks = marks + (7 * (this.credits[i]));
        else if (this.marks[i] >= 40) {
            marks = marks + (6 * (this.credits[i]));
        else {
            marks += 0;
        }
        t_credits += this.credits[i];
    }
    double sgp = (marks/t_credits);
    System.out.println("Your SGPA is " + sgp);
}

}
```