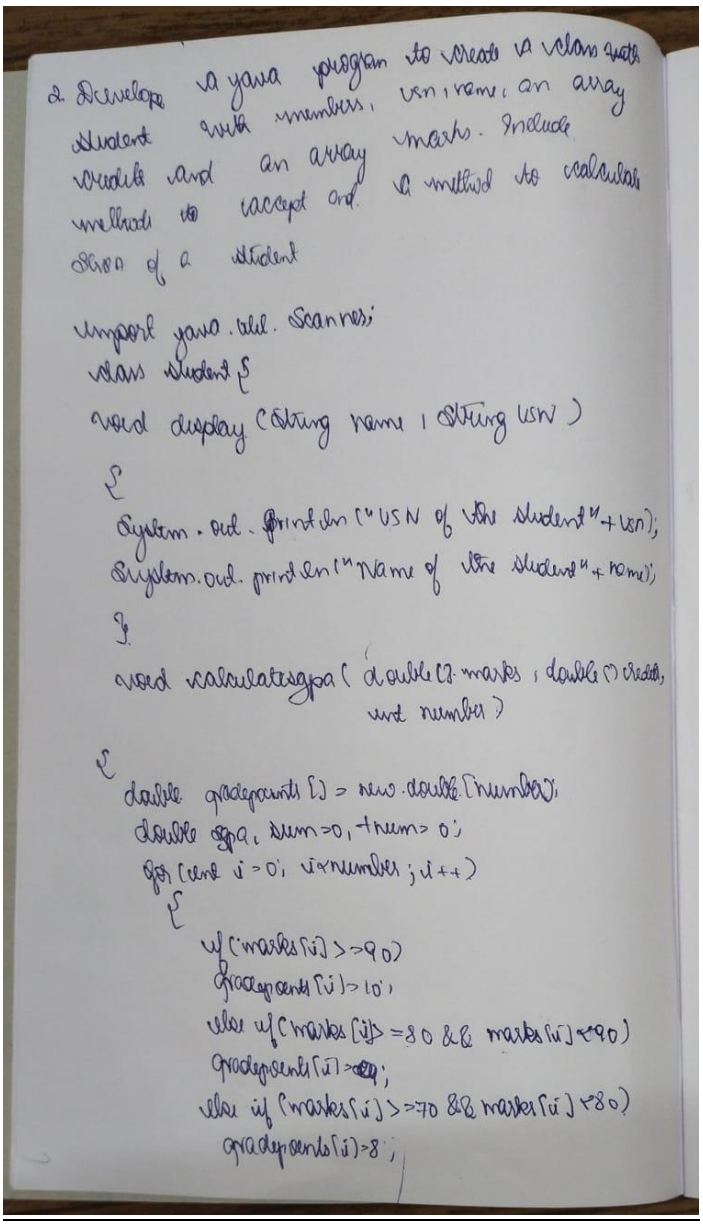
LAB PROGRAM -2

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.

CODE



```
2. Develop a java program to create a class with
Student with members, usn, name, an array
credits and an array marks. Include
methods to accept and a method to calculate
SGPA of a student

import java.util.Scanner;
class Student {
void display(String name, String USN)
{
System.out.println("USN of the student"+usn);
System.out.println("Name of the student"+name);
}
void calculatesgpa( double[] marks, double[] credits,
                    int number)
{
double gradepoints[] = new double[number];
double sgpa, sum=0, tnum=0;
for(int i=0; i<number; i++)
{
if(marks[i]>=90)
gradepoints[i]=10;
else if(marks[i]>=80 && marks[i]<90)
gradepoints[i]=9;
else if(marks[i]>=70 && marks[i]<80)
gradepoints[i]=8;
```

```
else if (marks[i] >=60 && marks[i]<70)
    gradepoints[i] = 7;
else if (marks[i] >=50 && marks[i]<60)
    gradepoints[i] = 6;
else if (marks[i] >=40 && marks[i]<50)
    gradepoints[i] = 4;
else
    gradepoints[i] = 0;
}
for (int i = 0; i< number; i++)
{
    sum += credits[i] * gradepoints[i];
}
for (int i = 0; i<number; i++)
    {num += credits[i];
}
sgpa = sum/num;
System.out.println ("SGPA is "+sgpa);
}
}
class sgpa {
public static void main(String args[])
{
    Scanner s = new Scanner (System.in);
System.out.println("Enter name & usn of the student");
String name = s.next();
String usn = s.next();
```

```
Student s1 = new Student();
System.out.println("Enter number of courses");
int number = s.nextInt();
double credits[] = new double[number];
double marks[] = new double[number];
for (int i=0; i<number; i++)
{
System.out.println("Credit of subject "+(i+1)+":");
credits[i] = s.nextDouble();
System.out.println("Marks of subject "+(i+1)+":");
marks[i] = s.nextDouble();
}
s1.display(name, usn);
s1.calculatesgpa(marks, credits, number);
}
}
```

Output :

OUTPUT:

```
C:\Users\bmsce\Desktop\1bm21cs062>java sgpa
enter name and usn of the student
sanjana 1bm21cs062
enter number of courses
9
credit of the subject1:
4
marks of the subject1:
94
credit of the subject2:
3
marks of the subject2:
94
credit of the subject3:
1
marks of the subject3:
89
credit of the subject4:
1
marks of the subject4:
96
credit of the subject5:
3
marks of the subject5:
86
credit of the subject6:
3
marks of the subject6:
65
credit of the subject7:
1
marks of the subject7:
86
credit of the subject8:
1
marks of the subject8:
81
credit of the subject9:
3
marks of the subject9:
85
usn of the student:1bm21cs062
name of the student:sanjana
sgpa is 9.1
```