SHREE VARNA M   Lab-2

1BM22CS263.

1) Develop a Java program to create 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.

Note: $SGPA = \dfrac{\sum[(course\ credits)(grade\ points)]}{\sum[(course\ credits)]}$

[including F Grade]

$CGPA = \dfrac{\sum[(course\ credits)(Grade\ points)]}{\sum[(course\ credits)]}$

```
import java.util.*;
class Subject {
    int subjectMarks;
    int credits;
    int grade;
}

class Student {
    Subject subject[];
    string name;
    string USN;
    double SGPA;
```

```java
    Scanner s;

    Student ()
    {
        int i;
        Subject = new Subject();
        for (i=0; i<3; i++)
        {
            Subject [i] = new Subject ();
        }
        s = new Scanner(System.in);
    }
}


void getStudentDetails()
{
    System.Out.println("Enter the name");
    name = s.next();
    System.out.println("Enter the USN");
    USN = s.next();
}


void getMarks()
{
    for(i=0; i<3; i++)
    {
        System.Out.println("Enter the marks
```

```java
                for Subject " + (i+1) + ":");
        Subject[i].SubjectMarks = S.nextint();
        System.out.println("Enter credit for
            Subject " + (i+1) + ":");
        Subject[i].credit = s.nextint();
        Subject[i].grade = subject[i].subject
                                    Marks/10)+1;

        if(Subject[i].grade == 11)
                Subject[i].grade = 10;

        if(Subject[i].grade <= 4)
                Subject[i].grade = 0;

    }
}


void ComputeSGPA()
{
    int Score = 0;
    int totalcredit = 0;
    for(int i=0; i<3; i++)
    {
        Score += Subject[i].credit * Subject[i].grade;
        totalcredit += subject[i].credit;
    }
    total = (double)Score / (double)totalcredit
}
```

```
class Main
{
    public static void main (String args);
    {
        Student S1: new Student ();
        S1. get Student Details ();
        S1. get Marks ();
        S1. compute SGPA ();

        System. Out. println ("Name?" +
                                        S1.name)
        System. out. println ("USN" + S1. USN
        System. out. println ("SGPA:" + S1.SGPA
    }
}
```

Output:

Enter your Name: Shree Varma
Enter the USN: 001 1BMSSCS263
Enter the marks of Subject 1 is 23
Enter the credits of Subject 1 is 4
Enter the marks of Subject 2 is 45
Enter the credits of Subject 2 is 5
Enter the marks of Subject 3 is 50
Enter the credits of Subject 3 is 3

Name : Shru

USN : 001BN22CS263

SGPA - 7.375.