

### 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.

```
import java.util.*;

class Student
{
    String USN;
    String name;
    int credits[];
    int marks[];
    int i,n,tot=0;
    double SGPA;

    Student()
    {
        SGPA=0;
    }

    void input()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the USN and name of student");
        USN=sc.nextLine();
        name=sc.nextLine();
        System.out.println("Enter the number of subjects");
        n=sc.nextInt();
        credits=new int[n];
        marks=new int[n];
        for(i=0;i<n;i++)
        {
```

```
System.out.println("Enter the credits of subject "+(i+1));
credits[i]=sc.nextInt();
tot=tot+credits[i];
}
for(i=0;i<n;i++)
{
System.out.println("Enter the marks of subject "+(i+1));
marks[i]=sc.nextInt();
}
}
```

```
void grade_point()
{
for(i=0;i<n;i++)
{
if(marks[i]>=90 && marks[i]<=100)
marks[i]=10;
else if(marks[i]>=80 && marks[i]<90)
marks[i]=9;
else if(marks[i]>=70 && marks[i]<80)
marks[i]=8;
else if(marks[i]>=60 && marks[i]<70)
marks[i]=7;
else if(marks[i]>=50 && marks[i]<60)
marks[i]=5;
else if(marks[i]>=40 && marks[i]<50)
marks[i]=4;
else if(marks[i]<40)
marks[i]=0;
}
```

```
}
```

```
void cal_SGPA()
```

```
{
```

```
for(i=0;i<n;i++)
```

```
{
```

```
SGPA=SGPA+(credits[i]*marks[i]);
```

```
}
```

```
SGPA=SGPA/tot;
```

```
}
```

```
void display()
```

```
{
```

```
System.out.println("-----");
```

```
System.out.println("Student details are:");
```

```
System.out.println("USN:"+USN);
```

```
System.out.println("Name:"+name);
```

```
System.out.println("SGPA:"+SGPA);
```

```
System.out.println("-----");
```

```
}
```

```
}
```

```
class lab2
```

```
{
```

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

```
{
```

```
Student stu=new Student();
```

```
stu.input();
```

```
stu.grade_point();
```

```
stu.cal_SGPA();
```

```
stu.display();
```

}

}

## OUTPUT

```
Command Prompt
12-11-2020 16:35      633 lab1.java
12-11-2020 17:45      1,658 lab2.java
06-11-2020 23:33      224 TestProgram.java
      4 File(s)        2,682 bytes
      0 Dir(s)  738,042,531,840 bytes free

C:\Users\Anagha\Documents\JavaPrograms>javac lab2.java

C:\Users\Anagha\Documents\JavaPrograms>java lab2
Enter the USN and name of student
anagha
1bm19bt005
Enter the number of subjects
2
Enter the credits of subject 1
4
Enter the credits of subject 2
5
Enter the marks of subject 1
80
Enter the marks of subject 2
75
-----
Student details are:
USN:anagha
Name:1bm19bt005
SGPA:8.4444444444444445
-----

C:\Users\Anagha\Documents\JavaPrograms>
```