

## Week 2

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 detail and a method to calculate SGPA of a student.

2/12/22 Week 2

2) Develop a Java Program to create a class Student with members usn, name, an array Credits & marks. Include methods to accept & display details & a method to calculate sgpa of student.

```
import java.util.Scanner;

class Student {
    String usn, name;
    int[] marks = new int[5];
    int[] Credits = new int[5];

    void accept() {
        Scanner SS = new Scanner(System.in);
        System.out.println("Enter USN:");
        usn = SS.next();
        System.out.println("Enter Name:");
        name = SS.next();
        System.out.println("Enter Marks");
        for (int i = 0; i < 5; i++) {
            marks[i] = SS.nextInt();
        }
        System.out.println("Enter Credits");
        for (int i = 0; i < 5; i++) {
            Credits[i] = SS.nextInt();
        }
    }

    void display() {
        System.out.println("USN: " + usn);
        System.out.println("Name: " + name);
        System.out.println("Marks in 5 Subjects:");
```

```

for (int i=0; i<5; i++){
    System.out.println(Marks[i]);
}
System.out.println("Credits of 5 Subjects");
for (int i=0; i<5; i++){
    System.out.println(Credits[i]);
}
}
int grade();
float sgpa();
float gpa=0, sum=0;
for (int i=0; i<5; i++){
    gpa += grade(marks[i] * Credits[i]);
    sum += Credits[i];
}
sgpa float m = (gpa/sum);
return m;
}
}

```

```

class Test{
    public static void main(String a[]){
        Save S
        Student S1 = new Student();
        S1.accept();
        S1.display();
        float f = S1.sgpa();
        System.out.println(f);
    }
}

```

```

int grade (int marks) {
    if (marks > 89)
        return 10;
    else if (marks > 79)
        return 9;
    else if (marks > 69)
        return 8;
    else if (marks > 59)
        return 7;
    else if (marks > 49)
        return 6;
    else
        return 0;
}

```

### Output

Enter your name : 1bm21cs032  
 Enter credits & marks of each subject respectively

4	55
3	65
2	75

Total Credits = 9

SGPA =  $6.77$  ~~7.8~~

```
System.out.println("Enter your Name ");
name=ss.nextLine();
System.out.println("Enter USN : ");
usn=ss.nextLine();
System.out.println("Enter credits and marks of each subject respectively ");
for(int i=0;i<3;i++)
{
    this.credits[i]=ss.nextInt();
    this.marks[i]=ss.nextInt();
}
}
void calculate()
{
for(int i=0;i<3;i++)
{
    if(marks[i]>=90 && marks[i]<=100)
        result+=10*credits[i];
    if(marks[i]>=80 && marks[i]<90)
        result+=9*credits[i];
    if(marks[i]>=70 && marks[i]<80)
        result+=8*credits[i];
    if(marks[i]>=60 && marks[i]<70)
        result+=7*credits[i];
    if(marks[i]>=50 && marks[i]<60)
        result+=6*credits[i];
    if(marks[i]>=40 && marks[i]<50)
        result+=5*credits[i];
    else result+=0*credits[i];
}
for(int i=0;i<3;i++)
    total+=credits[i];
result=result/total;
}
```

```
Command Prompt
C:\Users\student\Desktop\ooj 1BM21Cs037\week_2>javac lab2.java
C:\Users\student\Desktop\ooj 1BM21Cs037\week_2>java lab2
Enter your Name
surag
Enter USN :
1bm21cs037
Enter credits and marks of each subject respectively
4 99
3 95
2 37
Name:surag USN:1bm21cs037
credits Marks :
4 99
3 95
2 37
Total credits=9
Your SGPA=7.777777777777778
C:\Users\student\Desktop\ooj 1BM21Cs037\week_2>
```

Activate Windows  
Go to Settings to activate Windows.

Ln 56, Col 39 100% Windows (CRLF) UTF-8

Type here to search

24°C Partly sunny 11:59 AM  
12/2/2022