

Week-4

IBM19CS052

DIUVYANSHU

- d. 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  
{
```

```
    private String USN;  
    private String name;  
    private int n;  
    private double SGPA = 0;  
    private int totalCredits = 0;  
    Scanner ss = new Scanner(System.in);
```

```
    void Details()  
{
```

```
        System.out.println("Enter USN of the student");  
        USN = ss.nextLine();  
        System.out.println("Enter Name of the student");  
        name = ss.nextLine();  
        System.out.println("Enter no of subjects");  
        n = ss.nextInt();  
        int credits[] = new int[n];  
        double marks[] = new double[n];  
        System.out.println("Enter details of the subjects:");  
        for (int i = 0; i < n; i++)  
        {
```

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```
System.out.println("Enter credits allotted to the  
Subject "+ (i+1));
```

```
credits[i] = ss.nextInt();
```

```
System.out.println("Enter marks in the subject "  
+ (i+1));
```

```
marks[i] = ss.nextInt();
```

```
Calculate(credits[i], marks[i], i);
```

```
}
```

```
}
```

```
void Calculate(int credit, double mark, int j)
```

```
{
```

```
totalCredits = totalCredits + credit;
```

```
if (mark >= 90 && mark <= 100)
```

```
SGPA = SGPA + (10 * credit);
```

```
else if (mark >= 80 && mark <= 89)
```

```
SGPA = SGPA + (9 * credit);
```

```
else if (mark >= 70 && mark <= 79)
```

```
SGPA = SGPA + (8 * credit);
```

```
else if (mark >= 60 && mark <= 69)
```

```
SGPA = SGPA + (7 * credit);
```

```
else if (mark >= 50 && mark <= 59)
```

```
SGPA = SGPA + (6 * credit);
```

```
else if (mark >= 40 && mark <= 49)
```

```
SGPA = SGPA + (5 * credit);
```

```
else
```

```
System.out.println("Failed in subject "+ (j+1));
```

```
}
```

```
void Display()
```

```
{
```

```
System.out.println("Details of the Student");
```

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```
System.out.println("Name : " + name);  
System.out.println("USN: " + USN);  
System.out.println("SCPA of student " + (SCPA /  
    total credits));
```

```
}
```

```
}
```

```
class Main
```

```
{
```

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

```
{
```

```
    Student s1 = new Student();
```

```
    s1.Details();
```

```
    s1.Display();
```

```
}
```

```
}
```