

LAB 2

- Q. Write a Program to create a class Student with members usn, name, an array credits & an array marks. Include methods to Accept & Display Details and a method to calculate SGP of a student.

```
import java.util.Scanner;
```

```
class Student {
```

```
    String usn;
```

```
    String name;
```

```
    int credits[] = new int[8];
```

```
    int marks[] = new int[8];
```

```
    public void Details() {
```

```
        Scanner scanner = new Scanner(System.in);
```

```
        System.out.println("Enter student USN.");  
        usn = scanner.nextLine();
```

```
        System.out.println("Enter student Name");  
        name = scanner.nextLine();
```

```
        System.out.println("Enter Subject Details");
```

```
        for (int i = 0; i < credits.length; i++)  
        {
```

```
            System.out.println("Enter credits " +  
                (i+1) + " :");  
            credits[i] = scanner.nextInt();
```

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```
System.out.println("Enter marks " + (i+1));  
marks[i] = scanner.nextInt();
```

```
}  
}
```

```
public double SGPA()  
{
```

```
    int TotalCredits;
```

```
    int sum;
```

```
    double result;
```

```
    for (int i=0; i < credits.length; i++)
```

```
    {  
        TotalCredits += credits[i];
```

```
        int grade;
```

```
        grade = (marks[i] / 10) + 1;
```

```
        if (grade == 11)
```

```
        {
```

```
            grade = 10;
```

```
        }
```

```
        else if (grade <= 4)
```

```
        {
```

```
            grade = 0;
```

```
        }
```

```
        resultsum += grade * credits[i];
```

```
        result = sum / TotalCredits;
```

```
        return result;
```

}

```
public static void main (String args[])  
{  
    Scanner scanner = new Scanner (System.in);  
    System.out.println ("Student Details are :");  
    Student Student st = new Student();  
    st.details();  
    System.out.println ("Student Name is : "  
        + st name);  
    System.out.println ("Student USN is : "  
        + st usn);  
    double sgpa res = st.sgpa();  
    System.out.println ("Student SGPA is " +  
        result);  
}
```

{
}

OUTPUT:

Student Details are:

Enter student usn: ~~xxxxxxxx~~

abc

Enter Student Name:

xyz

Enter Subject details

Enter Credits 1

3

Enter marks 1

80

Enter Credits 2

3

Enter marks 2

80

Enter credits 3

4

Enter mark 3

90

Enter ~~marks 4~~ credits 4

3

Enter marks 4

90

Enter Credits 5

4

Enter marks 5

90

Enter credits 6

4

Enter marks 6

90

Enter credits 7

3

Enter Marks 7

90

Enter credits 8

3

Enter marks 8

90

Student Name is: xyz

Student usn is: abc

Student Sgpa is 9.0

29/12/23

Student Details are:

Enter Student USN:

abc

Enter Student Name:

xyz

Enter Subject Details

Enter Credits1

3

Enter Marks1

80

Enter Credits2

2

Enter Marks2

80

Enter Credits3

4

Enter Marks3

90

Enter Credits4

4

Enter Marks4

90

Enter Credits5

3

Enter Marks5

90

Enter Credits6

3

Enter Marks6

90

Enter Credits7

3

Enter Marks7

90

Enter Credits8

4

Enter Marks8

90

Student Name is:xyz

Student USN is:abc

Student Sgpa is9.0

Name:Adikar Charvi USN:1BM22CS012