

Lab - 2

- Q) Develop a java program to create a class Student with members usn, name, an array credits and an array marks. Include methods to display details and a method to calculate SGPA of a student.

```
import java.util.Scanner;
class Student {
    String usn;
    String name;
    int[] credits;
    int[] marks;
    void acceptDetails()
    {
        Scanner mark = new Scanner(System.in);
        Scanner(System.in);
        System.out
        System.out.println("Enter usn:");
        usn = mark.nextLine();
        System.out.println("Enter Name:");
        name = mark.nextLine();
        System.out.println("Enter number of subjects:");
        int n = mark.nextInt();
        credits = new int[n];
```



```
marks = new int[n];
for (int i = 0; i < credits.length; i++)
{
    System.out.println("Enter credits and marks:");
    credits[i] = mark.nextInt();
    marks[i] = mark.nextInt();
}

void calculateSgpa()
{
    int c = 0;
    int m = 0;
    for (int i = 0; i < credits.length; i++)
    {
        c += credits[i];
        m += marks[i];
    }

    System.out.println("Total credits: " + c);
    System.out.println("Total marks: " + m);
    double s = 0;
    for (int i = 0; i < credits.length; i++)
    {
        s += (marks[i] / 10 * credits[i]);
    }

    double sgpa = s / c;
    System.out.println("SGPA: " + sgpa);
}
```


}

void display() {

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

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

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

System.out.println("Credits for subject " + (i+1)
+ " is: " + credits[i]);S.O.P ("Marks for subject " + (i+1) +
" is: " + marks[i] + "\n");

}

}

public static void main (String[] Args)

{

SOP(" Name: Aparna Santkar USN: IBM23CS047");

int a, i;

Scanner object = new Scanner (System.in);

System.out.println("Enter no. of students:");

a = object.nextInt();

for (i = 0; i < a; i++) {

Student obj = new student();

obj.acceptDetails();

obj.calculateSgpa();

obj.display();

}

}

Output

Enter number of students:

1

Enter USN:

1BM23CS047

Enter name:

Aparna

Enter number of subjects:

2

Enter credits and marks:

4 56

Enter credits and marks:

3 76

Total credits: 7

Total marks: 132

SGPA : 5.857142857...

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16-10-24