

- ② Develop a java program to create a class student with members USN, name, an array credits & an array marks. Include methods to accept, display details & a method to calculate sgpa.

```

import java.util.Scanner;
class student {
    String USN, name;
    int credits[], marks[], gradePoints[], n;
    num = 0, deno = 0;
    double sgpa;
    void accept()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter student name, USN");
        name = s.next();
        USN = s.next();
        System.out.println("Enter no of subjects");
        n = s.nextInt();
        for (i = 0; i < n; i++)
        {
            System.out.println("Enter subject" + (i+1) + "marks");
            marks[i] = s.nextInt();
            System.out.println("Enter subject" + (i+1) + "credits");
            credits[i] = s.nextInt();
            deno += credits[i];
        }
    }
    void calculate()
    {
        for (i = 0; i < n; i++)
        {
            if (marks[i] >= 90)
                gradePoints[i] = 10;
        }
    }
}

```



```

else if (marks[i] >= 80 && marks[i] < 90)
    gradepoints[i] = 9;
else if (marks[i] >= 70 && marks[i] < 80)
    gradepoints[i] = 8;
else if (marks[i] >= 60 && marks[i] < 70)
    gradepoints[i] = 7;
else if (marks[i] >= 50 && marks[i] < 60)
    gradepoints[i] = 6;
else if (marks[i] >= 40 && marks[i] < 50)
    gradepoints[i] = 4;
else
    gradepoints[i] = 0;
num += credits[i] * gradepoints[i];
}

sgpa = num / den;

void display()
{
    System.out.println("Student Detail");
    System.out.println("name" + name + "\n"
        + "UEN" + UEN);
    System.out.println("marks + grade");
    for (i = 0; i < n; i++)
    {
        System.out.println(marks[i] + "\t" + grade[i]);
        System.out.println();
    }
    System.out.println("SGPA" + sgpa);
}

class StudentDemo
{
    public static void main (String args[])
    {
        Student s = new Student();
        s.accept();
        s.calculate();
        s.display();
    }
}

```


Administrator: C:\Windows\System32\cmd.exe - java stud

1:Input 2:Display 3:Calculate 4:Exit

3

SGPA is= 5.466666666666667

1:Input 2:Display 3:Calculate 4:Exit

1

Enter USN and name

1bm21cs007

aditya

Enter the number of subjects:

2

Enter credits of 2subjects:

2

3

Enter marks for the 2subjects:

66

77

1:Input 2:Display 3:Calculate 4:Exit

3

SGPA is= 7.6

1:Input 2:Display 3:Calculate 4:Exit