LAB PROGRAM 3

**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.Scanner; class Student

{

String usn,name; int[] credits,marks;

void acceptDetails()

{

Scanner sc = new Scanner(System.in); System.out.println("Enter USN:"); usn = sc.next();

System.out.println("Enter Name:"); name = sc.next(); credits = new int[4]; marks = new int[4];

System.out.println("Enter the details of credits and marks in order for 4 subjects:"); for(int i = 0; i < 4; i++)

{

System.out.println("Enter credits for Subject" + (i+1) +":"); credits[i] = sc.nextInt();

System.out.println("Enter marks for Subject"+ (i+1) +":"); marks[i] = sc.nextInt();

} } void display()

{

System.out.println("Student Details:");

System.out.println("USN:" + usn); System.out.println("Name:" + name); for(int i=0;i<4;i++)

{

System.out.println("Subject"+ (i+1) + "- Credits:" + credits[i] + ",Marks:" + marks[i]);

} } double calc()

{ int totalCredits = 0; double totalGradePoints = 0; for(int i=0;i<4;i++)

{ totalCredits += credits[i]; totalGradePoints += gradePoints(marks[i])\*credits[i];

} return totalGradePoints/totalCredits;

} int gradePoints(int marks)

{ if (marks >= 90) return 10; else if (marks >= 80) return 9; else if (marks >= 70) return 8; else if (marks >= 60) return 7; else if (marks >= 50) return 6; else if (marks >= 40) return 5; else return 0;

}

} class SGPA

{ public static void main(String[] args)

{

Scanner sc = new Scanner(System.in); System.out.println("Enter number of students:"); int numStudents = sc.nextInt();

Student student[] = new Student[numStudents]; for(int i=0 ;i < numStudents; i++)

{

student[i] = new Student(); student[i].acceptDetails(); student[i].display();

System.out.println("\n SGPA:" + student[i].calc());

}

}

}

OUTPUT :

A screenshot of a computer

AI-generated content may be incorrect.

A close-up of a paper

AI-generated content may be incorrect.

A notebook with writing on it

AI-generated content may be incorrect. A piece of paper with writing on it

AI-generated content may be incorrect.A close-up of a notebook

AI-generated content may be incorrect.