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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 name;**

**String usn;**

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

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

**double sgpa=0.0;**

**double cgpa;**

**int grade[] = new int[8];**

**double calculate(int m[], int c[])**

**{**

**int j;**

**double sum = 0.0;**

**int div = 0;**

**for (j = 0; j < 8; j++)**

**{**

**if (m[j] != 100)**

**{**

**grade[j] = (m[j] + 10) / 10;**

**}**

**else**

**{**

**grade[j] = 10;**

**}**

**div = credits[j] + div;**

**sum = sum + (grade[j] \* credits[j]);**

**System.out.println("Grade for subject " + (j + 1) + ": " + grade[j]); // error check**

**}**

**sgpa = sum / div;**

**System.out.println("SGPA: " + sgpa);**

**return sgpa;**

**}**

**double calcgpa(double sgpa1, double sgpa2)**

**{**

**cgpa=(sgpa1+sgpa2)/2;**

**return cgpa;**

**}**

**void input()**

**{**

**Scanner sc=new Scanner(System.in);**

**System.out.println("Now enter subject credits for semester:");**

**int i;**

**for (i = 0; i < 8; i++)**

**{**

**credits[i] = sc.nextInt();**

**}**

**System.out.println("Now enter subject marks for semester:");**

**for (i = 0; i < 8; i++)**

**{**

**marks[i] = sc.nextInt();**

**}**

**}**

**public static void main(String args[]) {**

**Scanner sc1 = new Scanner(System.in);**

**System.out.println("Enter number of students: ");**

**int n=sc1.nextInt();**

**Student obj[]=new Student[n];**

**int k;**

**for(k=0;k<n;k++)**

**{**

**obj[k]=new Student();**

**System.out.println("Enter Student name: ");**

**String name = sc1.next();**

**System.out.println("Enter Student USN: ");**

**String usn = sc1.next();**

**obj[k].input();**

**System.out.println("Semester 1");**

**double result = obj[k].calculate(obj[k].marks, obj[k].credits);**

**System.out.println("1st Semester SGPA for " + obj[k].name + " (" + obj[k].usn + ") is: " + result);**

**System.out.println("Semester 2");**

**obj[k].input();**

**double result2 = obj[k].calculate(obj[k].marks, obj[k].credits);**

**System.out.println("2nt Semester SGPA for " + obj[k].name + " (" + obj[k].usn + ") is: " + result2);**

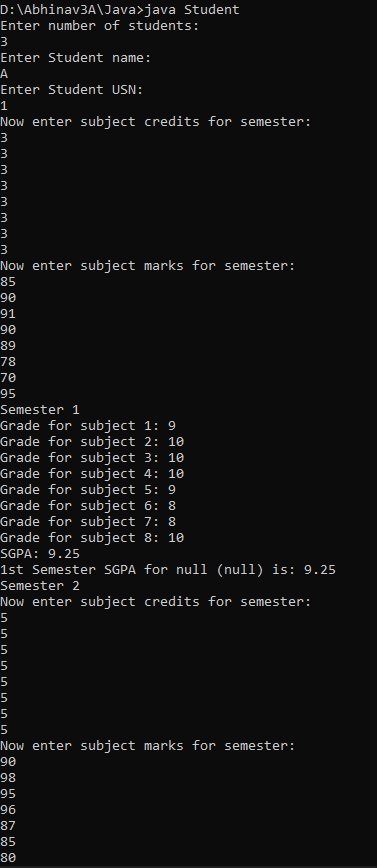
**System.out.println("CGPA for 1st year is : "+obj[k].calcgpa(result,result2));**

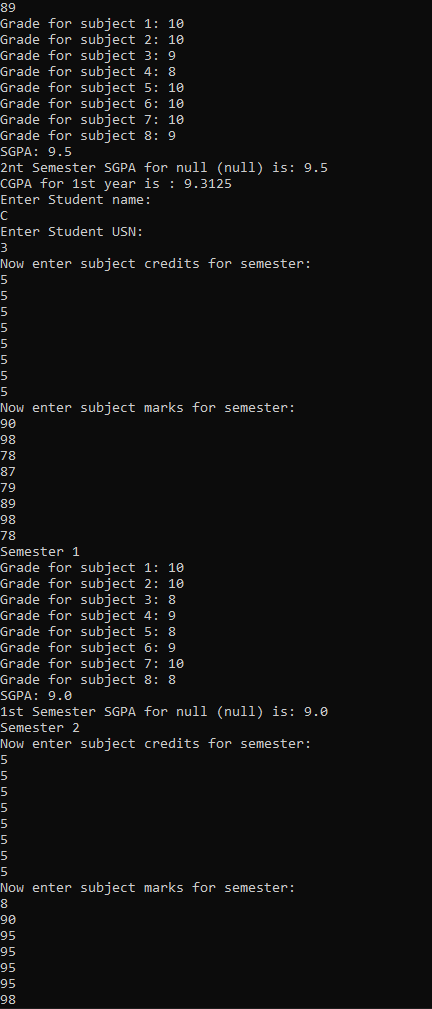
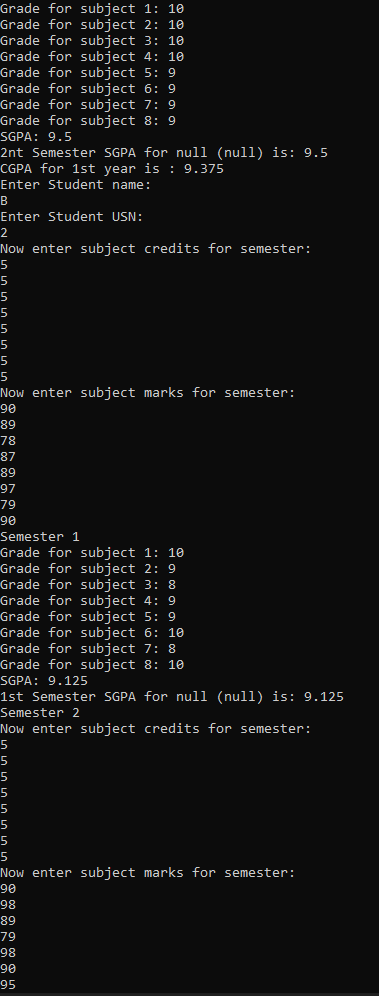
**}**

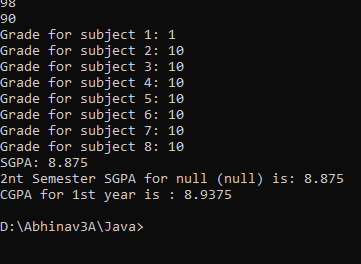
**}**

**}**

Output:





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