

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.*;
class Student {
    private String usn;
    private String name;
    private int credits[];
    private int marks[];
    private int n;

    void accept()
    {
        Scanner s=new Scanner(System.in);
        System.out.println("Enter student details");
        System.out.println("USN:");
        usn=s.next();
        System.out.println("Name:");
        name=s.next();
        System.out.println("Enter the number of subjects:");
        n=s.nextInt();
        credits=new int[n];
        marks=new int[n];
        System.out.println("Enter credits and marks attained by the student
in each subject");
        for(int i=0;i<n;i++)
        {
            credits[i]=s.nextInt();
            marks[i]=s.nextInt();
        }
    }
    void display()
    {
        System.out.println("Student details:");
        System.out.println("USN:"+usn);
        System.out.println("Name:"+name);
        System.out.println("Marks in each subject:");
        for(int i=0;i<n;i++)
        {
            System.out.println("Subject "+(i+1)+": "+marks[i]);
        }
    }
    double calculate()
    {
        int tcp=0,tc=0;
        for(int i=0;i<n;i++)
        {
            tc=tc+credits[i];
            if(marks[i]>=50)
```

```

        {
            tcp=tcp+((marks[i]/10)+1)*credits[i];
        }
        else if(marks[i]>=40 && marks[i]<50)
        {
            tcp=tcp+(4*credits[i]);
        }
    }
    return (double)tcp/tc;
}
}

```

```

public class Main
{

    public static void main(String ss[]) {
        Student s1=new Student();
        s1.accept();
        s1.display();
        System.out.println("SGPA: "+s1.calculate());
    }

}

```

```
Enter student details
USN:
123
Name:
ABC
Enter the number of subjects:
Enter credits and marks attained by the student in each subject
12
13
14
15
Student details:
USN:123
Name:ABC
Marks in each subject:
Subject 1:13
Subject 2:15
GPA: 8.0

...Program finished with exit code 0
Press ENTER to exit console.
```

1. Signature ("id")
 2. class student ("c")
 3. Private String name;
 4. Private String name;
 5. Private int credits;
 6. Private int maxCredits;
 7. Private int n;
 8. not accept;
 9.
 10. Signature s new Signature (Signature sa);
 11. Signature out println ("Enter student details
 12. um = s next li;
 13. Signature mid println ("Name")
 14. name = s next li;
 15. Signature mid println ("Enter the number of Subjects")
 16. n = s next int li;
 17. credits = n next int li;
 18. marks = n next int li;
 19. Signature out println ("Enter credits and marks
 20. added to by the student in each subject");
 21. for (int i = 0; i < n; i++)
 22. {
 23. credits li = s next int li;
 24. marks li = s next int li;
 25. }
 26. Print Display ();
 27.
 28. Signature out println ("Student details (");
 29. Signature out println ("ID" + um);
 30. Signature out println ("Name" + name);
 31. Signature out println ("Credits in each subject");

Scanned with CamScanner

```
for (int i = 0; i < n; i++)  
    {  
        System.out.println ("Subject " + Brk[i] + " marks[" + marks[i]);  
    }  
  
    // double calculate  
    int tcr = 0, tc = 0;  
    for (int i = 0; i < n; i++)  
    {  
        tc = tc + credits[i]  
        if (marks[i]) >= 60  
            tcr = tcr + (marks[i]/100) * credits[i]  
    }  
  
    return (double) tcr/tc  
}
```

Purple class main

```
// Purple  
Purple static void main (String ss[])  
{  
    Student s1 = new Student ();  
    s1.supt ();  
    s1.display ();  
    System.out.println ("supt+ : " + calculate());  
}
```

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Algorithm
Enter user, name, subject, credits and marks
Apply in formula: $GPA = \frac{\text{marks}}{\text{credits}}$
Calculate GPA percentage
Print the GPA percentage

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