

```
import java.util.*;  
public class CGPACalculator {  
    public static double getGradePoint (double total) {  
        if (total >= 80) return 4.00;  
        else if (total >= 75) return 3.75;  
        else if (total >= 70) return 3.50;  
        else if (total >= 65) return 3.25;  
        else if (total >= 60) return 3.00;  
        else if (total >= 55) return 2.75;  
        else if (total >= 50) return 2.50;  
        else if (total >= 45) return 2.25;  
        else if (total >= 40) return 2.00;  
        else return 0.00;  
    }  
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```

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public static string getLetterGrade (double cgpa),  
    if (cgpa >= 4.00) return "A+";  
    else if (cgpa >= 3.75) return "A";
```

```
else if (cgpa >= 3.50) return "A-";
else if (cgpa >= 3.25) return "B+";
else if (cgpa >= 3.00) return "B";
else if (cgpa >= 2.75) return "B-";
else if (cgpa >= 2.50) return "C+";
else if (cgpa >= 2.25) return "C";
else if (cgpa = 2.00) return "D";
else return "F";
```

```
public static void main (String[] args) {
    Scanner sc = new Scanner (System.in);
    System.out.print ("Student ID: ");
    String studentId = sc.nextLine();
    System.out.print ("No. of courses: ");
    int n = sc.nextInt();
    double totalGradePoints = 0, totalCredits = 0;
```



```
double creditTaken = 0; creditEarned = 0;
for (int i=1; i<n; i++) {
    System.out.println("In C" + i + " : ");
    System.out.print(" Credit (Max 3) : ");
    double credit = sc.nextDouble();
    System.out.print(" CT (Max 30) : ");
    double ct = sc.nextDouble();
    System.out.print(" AT (Max 10) : ");
    double at = sc.nextDouble();
    System.out.print(" FE (Max 60) : ");
    double fe = sc.nextDouble();
    double totalMarks = ct + at + fe;
    double gradePoint = getGradePoint(totalMarks);
    totalGradePoints += gradePoint * credit;
    totalCredits += credit;
}
```

```
creditTaken += credit;
if (gradePoint > 0) creditEarned += credit;
}
double cgpa = totalGradePoints / totalCredits;
String finalGrade = getLetterGrade(cgpa);
System.out.println("Student ID: " + studentId);
System.out.println("Credit Taken: " + creditTaken);
System.out.println("Credit Earned: " + creditEarned);
System.out.println("CGPA: %.2f\n", cgpa);
System.out.println("Grade: " + finalGrade);
}
```

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