

Write a Java program to calculate the CGPA of a student. The equation to calculate a CGPA is:

$$x = \frac{\Sigma(\text{Course Grade Point} \times \text{Course Credit Hours})}{\text{Total Number of Credit Hours}}$$

Use the following data structures:

int n = to take user input of total number of courses done

float array1[size n] = to take input of the final marks in each course

float array2[size n] = to take input of credit hours with respect to each of the courses

You may keep another array to store the grade point of each course as per the acquired final marks

float result; //prints the CGPA

Compare the final marks with respect to the following grading policy and store the GPA for further calculation:

Numerical Scores	Letter Grade	Grade Points (Per Credit)
93 and above	A Excellent	4.0
90 - 92	A-	3.7
87 - 89	B+	3.3
83 - 86	B Good	3.0
80 - 82	B-	2.7
77 - 79	C+	2.3
73 - 76	C Average	2.0
70 - 72	C-	1.7
67 - 69	D+	1.3
60 - 66	D Poor	1.0
Below 60	F* Failure	0.0
	I** Incomplete	0.0
	W** Withdrawal	0.0
	R** Retaken	0.0