- If you have questions during this lab do not hesitate to ask your lab demonstrator.
- All classes **must** have comments at the beginning containing your name and student number.

The UW calculates a student GPA as a weighted average that involves credit hours and grade points.

Given a student has N courses, let i represent the  $i^{th}$  course, let  $w_i$  be the number of credit hours for the  $i^{th}$  course and let  $g_i$  be the grade point value achieved for the  $i^{th}$  course, then the gpa over those N courses is

$$\frac{\sum_{i=1}^{N} w_{i} * g_{i}}{\sum_{i=1}^{N} w_{i}}$$

Write a program that obtains data for 5 courses (use a loop). For each course the user enters the credit hours and the grade obtained. The program must convert grades to their proper numeric grade point value (see table below), and calculate the student's gpa for those 5 courses.

**Example** of system interaction:

System: enter the credit hours and grade for each of 5 courses

User: 3 A
3 B
3 B
6 C
3 C

System: Your gpa is 2.6667

**Note**: the gpa reported above was calculated as

$$(3*4+3*3+3*3+6*2+3*2)/(3+3+3+6+3)$$

UWinnipeg Grades/Grade Points	
Grade	Grade Point Value
A+	4.5
Α	4.25
A-	4
B+	3.5
В	3
C+	2.5
С	2
D	1
F	0

**Submit** the file <code>Gpa.java</code> to the email for **your lab section** with **Subject** <code>Lab5.</code> E.g. if you are registered in lab ACS-1903L-070 then the email address to send to is 1903L-070@acs.uwinnipeg.ca