# The Graduation Problem

Many 4-year Universities are on the quarter-credit (rather than semester) system. You are given a student's GPA, total credit count, and honors credit count as input. The total credit count already includes the honors credits.

I have already written the **run()** function. Please **declare** and **define** the function **getStatus()** so that the program works correctly.

The graduation status to return is determined by the following rules:

- Students must have completed at least 180 credits with a GPA of at least 2.0 to graduate. A student who does not meet both of these constraints should receive a return value of "not graduating".

- Students who do have enough credits to graduate and sufficiently high GPAs will receive one of four return values depending on the GPA and number of honors credits:
    → All students with GPAs between 2.0 and 3.6 receive a return value of "graduating".
    → Students with fewer than 15 honors credits receive a return of "cum laude" if their GPA is at least 3.6 but less than 3.8, and a return of "magna cum laude" if their GPA is at least 3.8.
    → Students with 15 or more honors credits receive a return of "magna cum laude" if their GPA is at least 3.6 but less than 3.8, and a return of "summa cum laude" if their GPA is at least 3.8.

Here are some example inputs and their resulting output:

- For input of 3.87, 178, 16 the output is "not graduating"
- For input of 1.5, 199, 30 the output is "not graduating"
- For input of 2.7, 380, 50 the output is "graduating"
- For input of 3.62, 200, 200 the output is "magna cum laude"
- For input of 3.93, 185, 0 the output is "magna cum laude"

- For input of 3.85, 190, 15 the output is "summa cum laude"

You can assume that GPA will be between 0.0 and 4.0 and that both credit counts will be non-negative integers. You'll find the starter code in the download folder. To solve this problem, work step-by-step as we've done in the past.

Use **make test** to test your code, **make stest** or **make run** to run any student tests.

> **Note:** unlike previous exercises, this will mark your answers right or wrong, but will not tell you what the correct answer should have been when yours is wrong. You will have to calculate the correct value yourself.

Once your score is OK, use **make submit** to turn it in. If you get stuck, ask for help on Piazza, or come by my office hours (early!!!).