# Honor Role code kata

This kata is designed to require some dependency injection and mocking. There’s a database – maybe. Really it’s just some kind of data source. Maybe it’s a flat file? Your product owner swears they’ll find out. Meanwhile, use some combinations of stubs or mocks to test the business logic without creating a database connector.

The datasource will contain two items per student – student name, and GPA. Graduation ceremonies are coming soon and you need to find out what students are eligible to graduate, and which students will graduate with honors. GPA is a floating-point number that ranges from 0 – 4.0, inclusive.

1. Only students with a GPA of 2.0 or higher are eligible to graduate. Create a list of the names of students who are going to be graduating.
2. All students with a GPA of 3.5 or higher will graduate “Cum Laude”, or with honors. Create a list of the names of students who will graduate Cum Laude.
3. The two students with the highest GPA’s will graduate “Summa Cum Laude”. Create a list of the names of students who will graduate Summa Cum Laude.
   1. If more than two students are tied for the highest GPA, then all of them with that GPA will graduate Summa Cum Laude.
4. A student who graduates “Summa Cum Laude” cannot also graduate “Cum Laude”. Make sure the list of student names who graduate “Cum Laude” does not include the students who graduated “Summa Cum Laude”.
5. The school administrators want a report that shows the distribution of grades.
   1. Find the number of students who graduated with a GPA higher than 3.0, and the average GPA of those students.
   2. Find the number of students who graduated with a GPA between 2.0 and 3.0, inclusive, and the average GPA of those students.
   3. Find the number of students who did not graduate (their GPA is less than 2.0), and the average GPA of those students.