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Lab 1 Pt 2
CSC 365-03
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Initial Decision:

We decided to write the program in **Java**. We decided to create an additional model class,
Teacher, to hold data for their teachers.

Internal Architecture:
There is a data model class called Student.java which includes a field for :
- Student last name
- Student first name
- Grade
- Classroom
- Bus
- Gpa

In addition there is now a data model class called Teacher.java which includes a field for:
- Teacher last name
- Teacher first name
- Classroom

This allows each student and their data as well as each teacher and their data to be
encapsulated in a Java object which allows for easy sorting and matching using Java Library
functions.

At times, we used a Map, a Key-Value pairing, for some of the calculations. For example, to
determine the enrollments broken down by classroom, we walked through the list and for each
new classroom encountered, a new entry in the map is created, the key being the classroom
and the value initialized to 1. Then for each additional student found in that classroom, the value
is incremented.

Task Log
- Additional parsing for new commands - 1hr
- Modification of old functions to support and extend new functionality 2 hrs
- Analyzation Code - 1hrs
- Valid Command Checking - 1 hr

Notes on testing
- Went through every function and checked if output matched expected result
- Edge cases, implemented some code to handle the errors appropriately