CSC 365 - Databases
Lab 1 part 1

Team members: Cole Cummins, Jasmine Patel

Initial Decisions:

Programming Language: Python3
Environment: local machine

We debated using Pandas dataframes, but that would have been excessive considering the scope of the project. We used GitHub for collaboration.

Internal Architecture:

We chose to create a "Student" class that represents one student. A student has the following fields:

- first name
- last name
- Grade
- Classroom
- Bus
- Gpa
- Teacher first name
- Teacher last name

We read and parsed the students.txt file and used the data to create an array called "students." Each student line in students.txt is represented as a Student object in the s*tudents* array. Then we made a switch statement to handle all of the user logic. Depending on which command the user provides, a different query is done on the *students* array. This step involved iterating through the *students* array and selecting instances that matched the query. The answer then is displayed and the prompt appears again in loop until the user invokes the Quit.

Task log:

Task	Who	Start Time	End Time	How Long (approx in hours)
Set up: Git Hub, move files,	Jasmine	11:10	11:30	0.34

create initial empty files				
Create a class for Students and read in students.txt file to *students* array	Jasmine	11:40	12:40	1
Implemented “Quit” and “Information” commands	Jasmine	12:40	1:40	1
Implemented “Average”	Jasmine	3:00	3:30	0.5
Implemented “Teacher”, “Bus”, “Grade”, “Student”	Cole	12:00	12:45	0.75
Made “tests.txt” “tests.out” “README.md”	Cole	2:00	3:30	1.5

Notes on Testing:

	Jasmine	Cole
When	throughout the process/each time a new feature is developed	Each new command
How long	45 min within the development time	~10 mins
How many bugs	1-3	5-6
Total fixing time	45 min	10 mins

Final Notes:

Overall our implementation strategy worked out well and we were able to get correct results. It seemed a little tedious at times but the end result came out satisfactory.