

Team Members:  
Allen Zhai  
Wei Lin  
Steven Gandham

### Lab 1 Write Up

**Programming Language:** Python

**Environments:** VIM, Atom.

**Internal Architecture and Implementation:** We created a Student class containing student last and first name, grade, classroom, bus, GPA, and teacher last and first name. Overall, we parsed the text file and created a list of student objects. Required commands were generally fulfilled by traversing through the list and finding the matching key (StLastName, Grade, TLastName, etc). Therefore commands R4-R11 are  $O(n)$ .

Task Log:

Name of Task:	Assigned To:	Start Time:	End Time:	Total Person-Hours for Completion:
R9	Steven Gandham	1/7/20 11AM	1/7/20 11:30 AM	.5
R10	Steven Gandham	1/7/20 2:30 PM	1/7/20 3:15 PM	.75
R11	Steven Gandham	1/7/20 3:15 PM	1/7/20 3:45 PM	.5
R4	Allen Zhai	1/6/20 12:20 PM	1/6/20 12:25 PM	.08
R5	Allen Zhai	1/6/20 12:25 PM	1/6/20 12:35 PM	.16
R3	Allen Zhai	1/7/20 7:30 PM	1/7/20 8:15 PM	.75
R6	Wei Lin	1/6/20 11 AM	1/6/20 11:10 AM	.16
R7	Wei Lin	1/6/20 11:10 AM	1/6/20 11:15 AM	.08
R8	Wei Lin	1/6/20 11:15 AM	1/6/20 11:20 AM	.08
Command Error Handling	Wei Lin	1/8/20 8:40 AM	1/8/20 9:00 AM	.33
File Error Handling	Allen Zhai	1/8/20 8:50 AM	1/8/20 9:00 AM	.16

Writing test cases for R6-R8	Wei Lin	1/9/20 10:05 AM	1/9/20 10:20 AM	.25
General print output function and changed each print statement in all functions in functions.py as a double nested list as the return type	Wei Lin	1/9/20 10:20 AM	1/9/20 11:00 AM	.67
Writing Test Cases for R9-R11	Steven Gandham	1/9/20 3:00 PM	1/9/20 3:40 PM	.67
Error handling function to check if students.txt is loaded	Wei Lin	1/10/20 8:50 AM	1/10/20 9:00	.16

## Notes on Testing:

When:	Who:	Bug Description:	How Long:	# of Bugs Found:	How long it took to fix:
1/7/20 - 11-11:20AM - During Testing schoolSearch.py from Atom console	Steven Gandham	schoolSearch.py would not run due to a non-ASCII character '\xe2' to a single quote in "schoolSearch.py"	20 min	1	15 min
1/9/20 - 10:05-11AM - During testing schoolSearch.py from linux server	Wei Lin	The A[verage] command would error if there are no students in that grade, thus cannot find the average GPA of that grade. Another bug was that we must append all instances found into a list first before returning the list containing all entries in each function in functions.py	55 min	2	10 min