

Lab 1-b Writeup

Team Members: CSC 365-13 Arni Tiwari and CSC 365-15 Adya Choudhary

Implementation: We chose python as our programming language as we were both most comfortable with python. We decided to keep the students information from list.txt in a list of dictionaries to ease the process of searching. The keys in the dictionaries were last_name for student last name, first_name for student first name, grade for student grade, classroom for the classroom, bus for bus route, gpa for gpa, teacher_last for teacher last name and teacher_first for teacher first name. We decided to store the teachers information from teachers.txt in a list of dictionaries as well. The keys in the dictionaries were last_name for teacher last name, first_name for teacher first name and classroom for the classroom each teacher teaches.

For the new requirements we decided to take command line instructions as follows:

NR1 - Given a classroom number, list all students assigned to it SC: <number>

NR2 - Given a classroom number, find the teacher (or teachers) teaching TC: <number>

NR3 - Given a grade, find all teachers who teach it TG: <number>

NR4 - Report the number of enrollments per classroom CE

NR 5 - Report GPA statistics GPA-Grade, GPA-Bus, GPA-Teacher

Task Log:

Arni Tiwari:

Wrote functions to fulfill NR1-NR3 of the assignment, modified reading file functions to parse through list.txt and teachers.txt. Modified functions fulfilling R4 and R6 of lab 1-a to fit the changed format.

This took approximately 2 hours

Adya Choudhary:

Wrote code to fulfill NR4 AND NR5 of this assignment. Also modified functions SeachStudent_HigherGPA and SearchStudent_LowerGPA to include teachers.

This took approximately 1.5 hours.

Testing:

Arni did manual testing functions NR1-NR3 of the assignment to verify the correct output and handle invalid inputs. Also retested functions of lab 1-a fulfilling requirements R4-R9. This took approximately 1 hour

Adya did testing for functions fulfilling NR4 and NR5.

Bugs that were fixed:

NameError for some functions

Incorrect number of arguments passed