

Writeup: Lab 1a

- List of team members:
 - Coby Hong (no teammates).
- Initial Decisions:
 - Decided to work in Python as most familiar language for me currently.
 - Working on windows PC.
- Notes on chosen internal architecture:
 - Developed two dictionaries containing keys that led to specific functions.
 - One dictionary for search functions.
 - One dictionary for print functions.
 - The main structure was a two-item array.
 - First item being filtered student list returned from search function.
 - Second item being an integer that determined the print formatting.
 - General Layout:
 - User would type in their input.
 - This input would be parsed to grab keys to search functions and the data tied to those keys.
 - Based on key, program jumps to search function associated to that key and does appropriate filtering of student list. Returns that list with print formatting code.
 - Returned list is then printed based off the print formatting code.
 - This styling allows for multiple filters to be used in a single search and print on the last key search given by the user.
 - EX: >> G: 4 H:
 - Input is parsed.
 - First key is "G:" with data '4'.
 - Student list filtered by grade and returns code 4.
 - Second key is "H:".
 - Student list currently filtered by grade filtered again for highest GPA and returns code 5.
 - Parsed commands complete and does printing based off code to returned list.
 - Task Log:
 - Coby Hong – Coding, Testing, Write-Up. All of it.
 - About 8 hours.
 - Notes on testing:
 - Only bug found was that filters that are not listed to work together do work in my program due to the general design. Since mine parses, the input and does the search filters from left-to-right, inputs such as "T: KERBS B: 52" would work.
 - Final notes:
 - Would really like to have output examples. Seems everyone I talked to did completely different styles. Some did parse the input like me, others would have menus that led to other menus. Fairly long lab to do by oneself, though should of done in teams. Seems no one in class is in teams yet though so would think appropriate to have some sort of reach out board.