Homework 1 Design

* Header files
  + Iostream, string, file with structs and file with functions
    - File with struct should have headers for functions
    - File with functions will show the work
* Structs
  + Need a struct for student, and class
  + Each struct needs
    - Id, name
  + Student also need grades
  + Structs for collection of students and classes
    - Using linked list need head and tail
    - Limit the number of students to 100
    - Limit the number of classes to 25
    - Remember to delete any extra pointers or nodes
  + Struct for enrollment
    - This holds grade and relationship between students and classes
* Functions
  + Function to add students
  + Function to add classes
  + Function to add students to classes
  + Function to add grades to students
    - Find average grade for each student
  + Function to print list of students
  + Function to print list of courses
  + Function to print list of student grades in a course
    - Find average grade for course
  + Function to save a file
  + Function to read file
  + 3 separate functions to cleanup
  + Bubble sort and swap
* Main
  + Give a menu from 1-12
    - Make 0 the option to quit
    - Use a switch
      * Call each function in the switch cases
  + Use c++ style to open and close files
    - Include the option to save