

Each student will have the following properties

- Student name
- Student ID (an integer number)
- Midterm Grade
- Final Exam Grade
- Course Grade ($0.4 \text{ Midterm} + 0.6 \text{ Final Exam}$)
- Pass / Fail Status (Pass if Course Grade > 60)

The program should display a menu (in console) with following options

- * Add a new record
- * Find a record
- * Show basic statistics
- * Quit
- * (Optional) Delete a record

You can assign letters to each option (Q,q for quit for example)

* Add a new record : When selected, the user will be asked to enter name, student id, midterm grade and final grade. The program will then compute course grade and pass fail status for that student and keep in the struct.

* Find a record: When selected, the user will be asked to enter student id and the program will display, name, id, midterm grade, final grade, course grade and pass/fail status for that student. If not found, display that the record does not exist.

* Show basic statistics: Based on all entries, it will compute the statistics and display (number of passed, failed students and average course grade, number of students)

* Quit : When selected, it will exit the program. The records will be deleted automatically since they are not saved to a file. (DO NOT implement saving to a file.)

Notes:

- The application will have one infinite loop and the menu will be displayed after each operation.
- The user should select between three options by entering the corresponding character ('A' - Add a new entry, 'S' - Show statistics, 'Q' - Quit)
- It should accept both lower-case and upper-case characters for option selection.