**HW4: TextIndexedFile**

Due: June 3rd, 23:59

This is the 4th part of a programming project begun in HW1. We add indexes to the data file created by HW3.

1. Use class **TextIndexedFile** to create an index of a file of student objects, using student identifier as key. Write a driver program to create an index file from the student record file create by HW3.
2. Use class **TextIndexedFile** to create an index of a file of course registration objects, using student identifier as key**. Note that the student identifier is not unique in course registration files.** Write a driver program to create an index file from the student record file create by HW3.
3. Write a program that opens an indexed student file and an index course registration file and retrieves information on demand. Prompt a user for a student identifier and print all objects that match it.
4. Extend the related classes to support update and deletion of students records and course registration.

The next part of the programming projects is in HW5.

Requirements:

* The program should be compiled and executed in the Linux environments.
* Students compile their programs using g++ and make utility
* Please use separate compile (multiple compile)
* Use **a shared library**. Study the makefile of the source code repository.
* Test your program by using more than 20 Student objects and 20 CourseRegistration objects, respectively.
* Show that your search functions returns the correct values.
* Test your program by (1) deleting 3 Student/3 CourseRegistration objects and (2) updating 2 Student/2 CourseRegistration objects.

What to submit

* Please upload your source codes, Makefile, the report file (soft copy) **to your github repository** with a git push command.
* Use an attached file as a report template.