UNLI FRIENDS!

This is an extension of the student record code in the lecture. You will use DOUBLY LINKED LISTS WITH DUMMY NODES to store the records.

1. Add student **[HIGH]**
   - Adds a student and stores it in the record list
   - Must be sorted by STUDENT NUMBER

2. Add Friend on a Student **[HIGH]**
   - Specify a student (A) by supplying his/her student number (this is the student you want to add friends to).
     - If specified student exists, specify another student (B) by entering his/her student number (this is the student that you want add to the friend list of A).
       - If the student (B) is in the list of students, add (B) to the list of friends for that student (A)
       - If the student (B) does not exist, prompt a message that the target friend is not in the record.
     - If the student (A) does not exist prompt an message that target student to add friend to is not in the record then abort
   - The friendship is **MUTUAL/SYMMETRIC -** meaning if A is a friend of B then B is a friend of A

3. Edit Student

   Specify student that you want to edit by supplying student number
     - If exists, ask the user to edit the name and course
     - If not, prompt a message that it does not exist then abort

4. Delete Student including Friends **[HIGH]**
   - Specify student that you want to delete by supplying student number
     - If exists, delete the student in the student list and its list of friends
     - if not, prompt a message that does not exist then abort
   - You must also delete the instance of this student in all friends list of other students (e.g. If A is a friend of C and A is a friend of D then when A is deleted in the student list A must be deleted in C's friends list and D's friends list)

5. Delete Friend of a Student
   - Specify student that you want to delete from by supplying student number
     - If student exists, specify another student by supplying student number (student to be deleted to friend list)
       - If student is existent in list of students, delete the student to the list of friends for that student
       - If the student does not exist, prompt a message that target friend is not in the record then abort
     - If the student does not exist, prompt a message that target student to delete friend to is not in the record then abort
   - The friendship is MUTUAL so it must affect the other student that has the same relationship

6. Delete All Students (Including Friends)
   - Delete all records in the list including every student and each of their friends list

7. Delete All Friends of a Student
    - Specify student that you want to delete the friends list by supplying student number
        - If exists, delete the friends list of that student
        - if not, prompt a message that does not exist then abort
    - The friendship is mutual so it must affect all students that has the same relationship

8. View Students **[HIGH]**
    - Print the list of students with their student number, name and course
    - (OPTIONAL) You may also print the list of friends of each student

9. View Friends of a Student **[HIGH]**
    - Specify student that you want to print the friends list by supplying student number
        - If exists, print the friends list of that student
        - if not, prompt a message that does not exist then abort

10. Load Data **[HIGH]**
    - Load all data in text file(s) you created from Option 11
    - All data saved must be retrieved and the EXACT state of the save must be properly loaded

11. Save Data **[HIGH]**
    - Save all data in text file(s)
    - You may choose you own format and number of text files to use as long as it works with load (Option 10)

12. Exit **[HIGH]**
    - Exit the program

All Options TAGGED with HIGH must appear and work to get a passing score.

STUDENT DETAILS

1. STUDENT NUMBER
2. NAME (1-WORD required - Multiple Words Optional)
3. DEGREE (1-WORD - Multiple Words Optional)
4. LIST OF FRIENDS

FRIENDS

1. STUDENT NUMBER

LOAD AND SAVE OF DATA

You will load and save data in a text file. You may create 1 single file or many text files. The format of the data in the text file is up to you.