INTEGRATIVE PROGRAMMING AND TECHNOLOGIES

Laboratory Activity 04: List and Tuple

NAME	Tara Victoria E. Gerones
SECTION	TW23
PROFESSOR	Mr. Joseph Calleja

PROGRAM OUTPUTS

- *PROGRAM MENU:*

```
========================================
====== STUDENT RECORD MANAGEMENT =======
[1]. Open File
[2]. Save File
[3]. Save As File
[4]. Show All Students Record
[5]. Show Student Record
[6]. Add Record
[7]. Edit Record
[8]. Delete Record
[0]. Exit

========================================
Enter your choice: []
```

INVALID MENU CHOICE:

```
========================================
====== STUDENT RECORD MANAGEMENT =======
[1]. Open File
[2]. Save File
[3]. Save As File
[4]. Show All Students Record
[5]. Show Student Record
[6]. Add Record
[7]. Edit Record
[8]. Delete Record
[0]. Exit

========================================
Enter your choice: 10
----------------------------------------
Invalid choice. Try again.
----------------------------------------
```

- *ADD RECORD (SUCCESSFULLY):*

```
============== ADD RECORD ==============
Enter Student ID (6 digits): 202312
Enter First Name: Tara
Enter Last Name: Gerones
Enter Class Standing Grade: 100
Enter Exam Grade: 100
-------------------------------------------
Student Record Added Successfully.
-------------------------------------------
```

- *INVALID STUDENT ID (NEW RECORD):*

```
========================================
Enter your choice: 6
============== ADD RECORD ==============
Enter Student ID (6 digits): 2037845
-------------------------------------------
Invalid! Student ID must be exactly 6 digits.
-------------------------------------------
Enter Student ID (6 digits):
```

- *SAVE AS*

```
========================================
Enter your choice: 3
Enter file name: student_record.txt
-------------------------------------------
File Saved as student_record.txt.
-------------------------------------------
```

The file:

| student_record | 2/28/2025 2:41 PM | Text Document | 1 KB |

```
student_record - Notepad
File  Edit  Format  View  Help
Student ID: 202312
Student Name: Tara Gerones
Student Class Standing: 100.0
Major Exam Grade: 100.0
```

- *OPEN FILE:*

```
=====================================
Enter your choice: 1
Enter the file name you want to open: student_record.txt
-----------------------------------------
File opened successfully.
-----------------------------------------
```

- *INPUT FILE NAME DOES NOT EXIST:*

```
=========================================
Enter your choice: 1
Enter the file name you want to open: record.txt
-----------------------------------------
File not found.
-----------------------------------------
```

- *SAVE FILE:*

Added another record then saved to student_record.txt:

```
==========================================
Enter your choice: 6
============== ADD RECORD ==============
Enter Student ID (6 digits): 202335
Enter First Name: Diane
Enter Last Name: Alas
Enter Class Standing Grade: 97
Enter Exam Grade: 96
---------------------------------------------
Student Record Added Successfully.
---------------------------------------------
```

Saved output:

```
==========================================
Enter your choice: 2
---------------------------------------------
Record saved to student_record.txt
---------------------------------------------
```
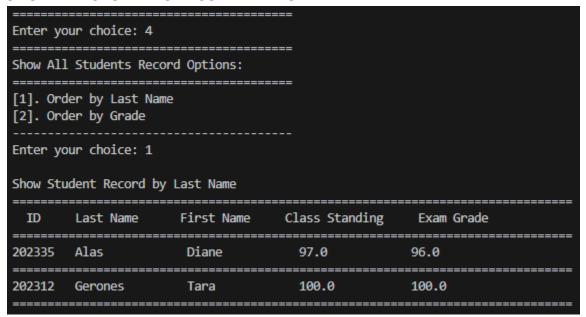
Updated File Content:

If no file is opened but the user input choice 2 (save file):

- ***SHOW ALL STUDENTS RECORD BY LAST NAME:***

- ***SHOW ALL STUDENTS RECORD BY GRADES***

```
========================================
Enter your choice: 4
========================================
Show All Students Record Options:
========================================
[1]. Order by Last Name
[2]. Order by Grade
----------------------------------------
Enter your choice: 2

Show Student Record by Grade
====================================================================================
  ID     Last Name       First Name      Class Standing      Exam Grade
====================================================================================
202335    Alas              Diane             97.0              96.0
====================================================================================
202312    Gerones           Tara             100.0             100.0
====================================================================================
```

- ***EDIT RECORD***

  Edit student ID:

```
========================================
Enter your choice: 7
============= EDIT RECORD ==============
Enter Student ID to edit: 202335
========================================
What do you want to edit?
========================================
[1] Student ID
[2] Name
[3] Class Standing
[4] Major Exam Grade
[0] Go Back
----------------------------------------
Enter your choice: 1
Enter new Student ID: 202343
----------------------------------------
Student ID updated successfully!
----------------------------------------
```

Edit Name:

```
=========================================
What do you want to edit?
=========================================

[1] Student ID
[2] Name
[3] Class Standing
[4] Major Exam Grade
[0] Go Back
-----------------------------------------
Enter your choice: 2
Enter new First Name: Victoria
Enter new Last Name: Enriquez
-----------------------------------------
Student Name updated successfully!
-----------------------------------------
```

Edit Class Standing:

```
=========================================
What do you want to edit?
=========================================

[1] Student ID
[2] Name
[3] Class Standing
[4] Major Exam Grade
[0] Go Back
-----------------------------------------
Enter your choice: 3
Enter new Class Standing: 93
-----------------------------------------
Class Standing updated successfully!
-----------------------------------------
```

Edit Major Exam Grade:

```
========================================
What do you want to edit?
========================================

[1] Student ID
[2] Name
[3] Class Standing
[4] Major Exam Grade
[0] Go Back
----------------------------------------
Enter your choice: 4
Enter new Major Exam Grade: 96
----------------------------------------
Major Exam Grade updated successfully!
----------------------------------------
```

- *SHOW STUDENT RECORD*
  (after editing the record of 202335)

```
========================================
Enter your choice: 5
========= SHOW STUDENT RECORD =========
Enter Student ID: 202343
----------------------------------------
Student ID: 202343
Name: Victoria Enriquez
Class Standing: 93.0
Major Exam: 96.0
========================================
```

- *DELETE RECORD*

```
============ DELETE RECORD ============
Enter Student ID to delete: 202312
----------------------------------------
Record deleted.
----------------------------------------
```

Deletion Test:

```
===========================================
Enter your choice: 5
========= SHOW STUDENT RECORD ==========
Enter Student ID: 202312
-------------------------------------------

-------------------------------------------
Student not found.
-------------------------------------------

-------------------------------------------
```

- *EXIT*

```
===========================================
Enter your choice: 0
-------------------------------------------
Thank you. Have a Nice Day!
-------------------------------------------
```