**15.2**

In this Codio project, you will practice using Python *lists, functions,* and *dictionaries* to create a database that contains student names, information about problem sets that were given to them, and their grades for each problem.

In the first part of this project, you will work with a simplified version of the database that is constructed using *lists.* Next, you will create a more advanced, faster, and efficient version of the database that uses *dictionaries* to store its entries. Finally, you will be asked to define some advanced Python *functions* that compute the weighted average for each student in the database.

This coding project is designed as a comprehensive assessment of the topics covered during the module. The questions in the project are designed to be more difficult than the ones presented to you throughout the module. However, enough detail will be provided to you so that you can successfully complete the project.

Follow the instructions in Codio to complete this activity. A detailed Codio Quick-Start Guide can be found at the following link: [Codio Assignment Quick-Start Guide for Python](https://classroom.emeritus.org/courses/10605/pages/codio-for-python?module_item_id=1816458).

For this activity, you can earn full points by answering all of the questions correctly. Partial points can be earned. If some questions are answered correctly, you will earn the number of points listed for each question that you have answered correctly. You are able to check whether you got each question correct after submitting the activity. Only the highest mark for each question will be registered in the Gradebook. You may resubmit the activity until the due date.

Please feel free to refer to the Module 15 Q&A Discussion with any questions that you have regarding this coding project or to discuss with your peers.

**15.3**

In this Codio project, you will practice using Python *lists, functions,* and redundant *dictionaries* to create a database that contains student names, information about problem sets that were given to them, and their grades for each problem.

In this project, you will use some of the *functions* that were defined in [Project 15.2: Project 2 Part 1](https://classroom.emeritus.org/courses/10605/assignments/246363) to initialize your database.

The goal of this project is for you to improve the *functions* to create the database by using redundant *dictionaries* to define a database that contains the weighted average for each student.

Follow the instructions in Codio to complete this activity. A detailed Codio Quick-Start Guide can be found at the following link: [Codio Assignment Quick-Start Guide for Python](https://classroom.emeritus.org/courses/10605/pages/codio-for-python?module_item_id=1816458).

For this activity, you can earn full points by answering all of the questions correctly. Partial points can be earned. If some questions are answered correctly, you will earn the number of points listed for each question that you have answered correctly. You are able to check whether you got each question correct after submitting the activity. Only the highest mark for each question will be registered in the Gradebook. You may resubmit the activity until the due date.

Please feel free to refer to the Module 15 Q&A Discussion with any questions that you have regarding this coding project or to discuss with your peers.