IVY TECH COMMUNITY COLLEGE, Lafayette  
SDEV 140 / Introduction to Software Development  
M15 Python Final Project (100 points)

**INTRODUCTION**: This is the final Python program in this class. You will have just under FOUR weeks to complete it. (The due date is Wednesday, May 8, at 11:59 pm.)

The project will cover many of the skills you have learned THROUGH CHAPTER 6 of the textbook. You will adapt the Python programs from the book for the Midnight Coffee Roasters business, into a business of your choosing. You will adapt the following files:

* add\_coffee\_record.py
* show\_coffee\_records.py
* search\_coffee\_records.py
* modify\_coffee\_records.py
* delete\_coffee\_record.py

You should make up your own business, which can be pretty much anything that provides a product or service. The coffee business records have two data fields: Description (descr) and Quantity (qty). For your business, you are to add a third field for Price (price). This will require:

* Renaming all the files listed above to reflect the nature of your business, by replacing “coffee” in the filename with a keyword for your business. For example, if your business is about ordering DVDs, the first file could be named “add\_DVD\_record.py”.
* Modifying the files to include the new Price field.
* Adding try/except to each file to catch IOError and ValueError exceptions

In addition, you need to create a new Python program, named order\_*keyword*.py, where *keyword* is the keyword for your business. So if your keyword is DVD, the new program will be named order\_DVD.py. This program includes the code for show\_*keyword*\_records, displaying all the records in the file, then asks which product or service the user wants to order, asks for the quantity, then computes and displays the price. This program stays in a loop until the user chooses to quit. The interaction might look like this:

*Enter the description of the item you want to order, or Q to quit:* ***HAMMER****How many of the item do you want to order?* ***10*** *The cost will be: $9.90*

*Enter the description of the item you want to order, or Q to quit:* ***Q****Thank you!*

Include documentation in each program. There should be four lines at the top of the program, just under the Public Class line. Comments start with an apostrophe (single quote). The four lines should include:

* Program name
* Author (your name)
* Date last edited
* Description of the program (1 or 2 sentences)

The program is worth 100 points:

* All modified programs run correctly without crashing, including the new Price field
  + add\_*keyword*\_record.py (15)
  + show\_*keyword*\_records.py (15)
  + search\_*keyword*\_records.py (15)
  + modify\_*keyword*\_records.py (15)
  + delete\_*keyword*\_record.py (15)
* The new program, order\_*keyword*.py, works correctly (15)
* There are documentation lines in the code for all programs (10 points)

If you have questions, please email the instructor. Start on the project early so that you will not miss the deadline. Projects are due Wednesday night, May 8, and there will be a 20-point penalty for projects submitted late, and NO project will be accepted after 11:59 pm Thursday, May 9. (Class ends on May 10!)