

Zelle 3e Chapter 1 Coding Assignment

General Instructions

My expectations for your work on coding assignment exercises will grow as we progress through the course. In addition to applying any new programming techniques that have been covered in the current chapter, I will be expecting you to follow all of the good programming practices that we have adopted. Here is a quick summary of good practices that we have covered so far:

- Include a single-line comment with name of program file.
- Include a single-line comment that describes the intent of the program.
- Place your highest-level code in a function named `main`.
- Include a final line of code in the program that executes the `main` function.
- Follow all PEP-8 Python coding style guidelines enforced by the PyCharm Editor. For example, place two blank lines between the code making up a function and the code surrounding that function.
- Choose names for your variables that are properly descriptive.
- Model your solution after the code that I demonstrate in the tutorial videos.
- Remember to test your program thoroughly before submitting your work.

Exercise 1 (Required)

Create a new Python program file named *solong.py*. This program should print a single line: “So long for now!”.

Model your solution after the code that I demonstrated in the tutorial video.

When running your test, you should expect the following output on your console:

```
So long for now!
```

Exercise 2 (Required)

Copy the Python file presented in Chapter 1 named *chaos.py*, creating a new file named *math101.py*. Modify the code in *math101.py* so that it prints a much simpler sequence of numbers: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20. Model your solution after the code that I demonstrated in the tutorial video.

When running your test, you should expect the following output on your console:

```
2
4
6
8
10
12
14
16
18
20
```

Exercise 3 (Optional Challenge Exercise)

The goal of this exercise is to print an Emily Dickinson poem using the multi-function program design illustrated in the *Python Plumbing* tutorial video. Your solution must meet the following requirements:

1. The poem must be one that you choose from those included in *Poems by Emily Dickinson, Three Series, Complete* by Emily Dickinson available at:
 - <https://www.gutenberg.org/ebooks/12242>
2. You must choose a poem other than *Hope*. That is the poem that I chose to use for the official class solution (see output below).
3. You must choose a poem that has a title and contains at least 3 stanzas.
4. Each stanza of the poem must be printed by a separate Python function as demonstrated in the latter part of the *Python Plumbing* tutorial video.
5. Your program output should include the title of the poem and the author credit. See my example output below for the full formatting scheme that you need to use.
6. Your program should be named *print_dickinson.py*.
7. Your program should follow all of the good coding practices covered in the course so far.

When running your test, you should expect output on your console similar to the following:

```
HOPE by Emily Dickinson

Hope is the thing with feathers
That perches in the soul,
And sings the tune without the words,
And never stops at all,

And sweetest in the gale is heard;
And sore must be the storm
That could abash the little bird
That kept so many warm.

I 've heard it in the chillest land,
And on the strangest sea;
Yet, never, in extremity,
It asked a crumb of me.
```

Tools

Use PyCharm to create and test all Python programs.

Submission Method

Follow the process that I demonstrated in the tutorial video on submitting your work. This involves:

- Locating the properly named directory associated with your project in the file system.
- Compressing that directory into a single .ZIP file using a utility program.
- Submitting the properly named zip file to the submission activity for this assignment.

File and Directory Naming

Please name your Python program files as instructed in each exercise. Please use the following naming scheme for naming your PyCharm project:

```
surname_givenname_exercises_zelle_3e_chapter_01
```

If this were my own project, I would name my PyCharm project as follows:

```
trainor_kevin_exercises_zelle_3e_chapter_01
```

Use a zip utility to create one zip file that contain the PyCharm project directory. The zip file should be named according to the following scheme:

```
surname_givenname_exercises_zelle_3e_chapter_01.zip
```

If this were my own project, I would name the zip file as follows:

```
trainor_kevin_exercises_zelle_3e_chapter_01.zip
```

Due By

Please submit this assignment by the date and time shown in the Weekly Schedule.

Last Revised

2022-01-21