CS 224 Introduction to Python | Spring 2019

Closed Lab 2

University of Wisconsin – La Crosse | *February 20*

List Comprehensions

Description: Along with this document, you downloaded one directory: `datafiles`. This is very similar to the directory you used in Program 1. The only difference is that some of the `run.x` directories within `datafiles` now include an additional file called `run.x.rand`. Note that all of the `run.x` directories contain a file called `run.x.random`. Please do not confuse the two.

Details: You will write several list comprehensions. Some of you will find them challenging. If so, I suggest that you first accomplish the same task using a loop structure and then convert that to a comprehension. You are welcome to search the interwebs for information that will help you.

1. Write a list comprehension that creates a list of `run.x` directories that contain a `run.x.rand` file.
2. Write a list comprehension that creates a list of `run.x` directories for which `x` is an even integer.
3. Write a list comprehension that creates a list of pairs (`run.x`, `run.y`) such that $x + y \equiv 0 \bmod 100$.