CSC 4800 Python Applications Programming

HW/Lab #3 – Chapter 1 Exercises

Due: Wednesday, January 25, 2017

Chun: Core Python Applications Programming

Create Python "re" regular expressions for the following Chapter 1 exercises. Show that your solutions work by implementing and testing them in a Python script or program (either one containing solutions and tests for all the exercises, or several smaller examples).

Turn in printed assignment in class.

- 1) Print out of source code.
- 2) The example execution that demonstrates that your Regex solutions work.

Exercise 1-4: Match the set of all valid Python identifiers.

Be sure to look up the language definition in the Python documentation.

Exercise 1-5: Match a street address according to the American format (keep your regex general enough to match any number of street words or multi-word street names).

American street addresses use the format:

3307 3rd

3307 3rd West

1180 Bordeaux Drive

3210 De la Cruz Boulevard

Exercise 1-6: Match simple Web domain names that begin with "www." and end with a ".com" suffix.

Exercise 1-7: Match the set of the string representations of all Python integer literals.

Be sure to look up the language definition in the Python documentation – there are several variations.

Exercise 1-11: Match the set of all valid e-mail addresses. (Start with a loose regex, and then try to tighten it as much as you can, yet maintain correct functionality).

Exercise 1-12: Match the set of all valid Web site addresses (URLs). (Start with a loose regex, and then try to tighten it as much as you can, yet maintain correct functionality).