Intro to Python: Class 5 Outline

Concepts introduced here will be demonstrated using sample scripts and documents in: https://github.com/skoshiwosh/democode and https://github.com/skoshiwosh/cgpython

1) Third Party Modules Overview
   - PySide2, PyQt5, OpenImageIO, PIL, NumPy, SciPy, OpenCV
   - maya.cmds, maya.mel, OpenMaya, PyMel
   - python modules for Houdini, Nuke, MotionBuilder, Clarisse

2) Intro to Python Scripting in Maya
   - userSetup.py, Maya.env
   - custom shelves, Maya's script editor
   - review zurbrigg_tutorials.pdf

3) Review important maya commands: these are some
   - file, ls, select, group, getAttr, setAttr, addAttr, listAttr, connectAttr, listRelatives, listConnections, objExists, makeIdentity, delete, move, scale, rotate, xform, quit, rename, duplicate, polyCube, sphere, curve, keyframe, setKeyframe, playbackOptions, render, camera, particle, emitter, expression, loadPlugin, unloadPlugin
   - strategy to create Maya python script is to perform operations manually then translate echoed mel commands to Maya python commands

4) Demo maya.cmds and scnutils.py

5) Use these maya scene files to demonstrate Maya Python commands
   - primitives_03.ma, circus_flybird_v06.ma, run_makecity_01.ma, city_bldings_hill_v03.ma

6) Review patterns_web.py and src_html.py