## Intro to Python: Class 4 Outline

Concepts introduced here will be demonstrated using sample scripts and documents in: <a href="https://github.com/skoshiwosh/democode">https://github.com/skoshiwosh/democode</a> and <a href="https://github.com/skoshiwosh/cgpython">https://github.com/skoshiwosh/cgpython</a>

- 1) Custom Functions
  - use upv.py, web patterns.py, and findtabs.py as examples
  - keywords: def, return
  - code block, local vs global variables
  - function input parameters, default values, keyword arguments
  - docstrings
  - why use functions?
- 2) Third Party Modules Overview
  - PySide2, PyQt5, OpenImageIO, PIL, NumPy, SciPy, OpenCV
  - maya, mel, OpenMaya, PyMel
  - python modules for Houdini, Nuke, MotionBuilder, Katana
- 3) Custom Modules and Packages
- 4) Intro to Python Scripting in Maya
  - userSetup.py, Maya.env
  - custom shelves, Maya's script editor
  - review zurbrigg tutorials.pdf
- 5) Demo maya.cmds and scnutils.py