Description of example Python scripts By: Suzanne Berger, Date: September 16, 2018

1. templatescript.py

This script is intended to help beginner python programmers get started with their first script. The main function is called immediately from the main section with the list of command line arguments. The default input is an empty list meaning no inputs are required. The main function does all the argument parsing and then calls function to perform task on the input arguments. The advantage of having main as a function called from main section is that the script can be either executed directly from a command line or imported as a module for the main function to be called subsequently. This can help users who are developing with idle because there isn't a direct method to run a script requiring command-line arguments directly from idle.

2. demoscript.py

This script demonstrates some basic techniques for parsing and checking input arguments. Note that sys.argv is used here. Note that the python module, argparse, provides more advanced features for handling input command line arguments. This script also contains some simple control flow logic.

3. seqtypes.py

This script further demonstrates control flow while introducing sequence types: str, list. Most of this code creates and modifies strings and lists. There is some introduction to tuples and sets. Only built-in functions and methods are used in this script. Note that the string module contains methods that perform more complex operations.

Question: Why do we need scripts that can be executed both from the command line and from an interactive GUI?

Question: Why should importable modules also be executable from command line?