MAPTIME PYTHON

Maptime MSP

January 11, 2016
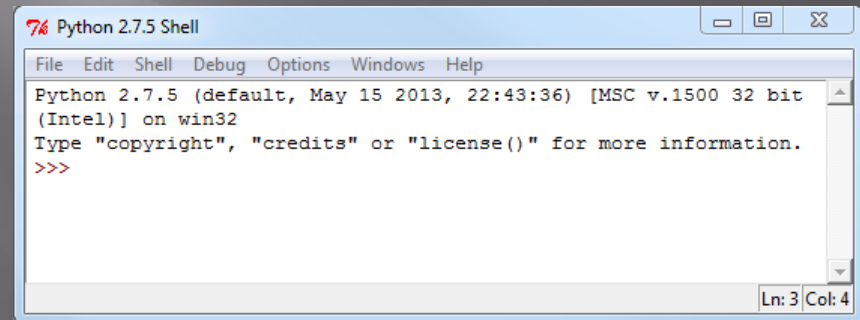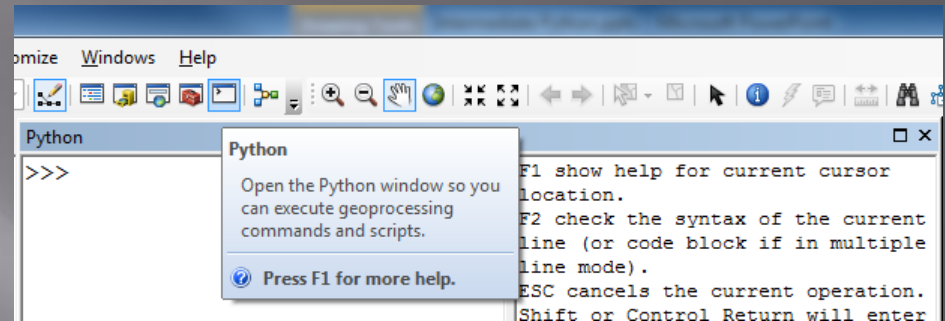
Zeb Thomas

How I Learned Python

- MGIS from UMN
- MN DNR GIS Data Systems Coordinator
- Mentors
- See other people's code
  - Tutorials
  - Group projects
  - PyMNtos, PyLadiesTC, Maptime MSP
  - Use as template for own explorations

Coding Environments

- ArcMap python window

- Interactive Development Environments (IDEs)

  - IDLE

  - PyScripter

    http://sourceforge.net/projects/pyscripter

Tips and Tricks

- ▣ Interactive window makes testing easy
  - ▪ If you're not sure, try out a snippet (immediate feedback)
  - ▪ dir() and help()
- ▣ Don't forget comments
  - ▪ # inline comments
  - ▪ """block comments"""
- ▣ You're not alone (the Internet is your friend)
  - ▪ Esri online help (match software version)
  - ▪ Search engine
    - ▫ Stack Overflow
    - ▫ GIS Stack Exchange
    - ▫ Esri Forums
  - ▪ Libraries (pip)

Functions

- Sub-scripts that can be executed repeatedly
- Help break up the code, make it more readable
- Self-documenting
- Reduces copying and pasting of code
- Easier to maintain
- Requires understanding local / global
- Create your own modules / libraries

Continuing Challenges

- Blocking out sufficient time for intense focus
- Keep pushing beyond comfort zone