Brief Introduction to Python and Network Programming

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Goals

- Brief introduction to Python
- End to end programming solution for a sample problem

- Why Programming?
- Why Python?

• Why Programming?



- Fun: Hacking, Analysis

• Why Python?

• Why Programming?



- Fun: Hacking, Analysis

• Why Python?

- Why Programming?
- Why Python?
 - Easy to learn
 - Generally terse
 - Large availability of libraries

Hello, World!

- Comes pre-installed on most Unix-based systems
 - OS X
 - Ubuntu, Debian

• \$ python program_name.py

Dealing with Road Blocks

- 1. Google
 - <u>http://lmgtfy.com/?q=print+without+new+line+python#</u>
- 2. Read documentation
 - Not videos!
 - Not everything is in videos, not indexable
- 3. Read examples
 - Documentation, Q&A boards, blog posts
 - Tinker with examples
 - Be brave; try all solutions even if lengthy
- 4. Isolate the problem
- 5. Ask in Q&A boards
 - Try Stack Exchange: Good answer rate
- 6. Consider alternate approaches
- 7. Ask developers
- 8. Take a break

Other Ideas

- Extend this to do some video capture
- Analysis: Traffic from Atlanta to Athens
 Use Google Maps API
- Analysis: Which city has the worst traffic?
- Hacking: Automatically email your favorite celebrity's social media posts.