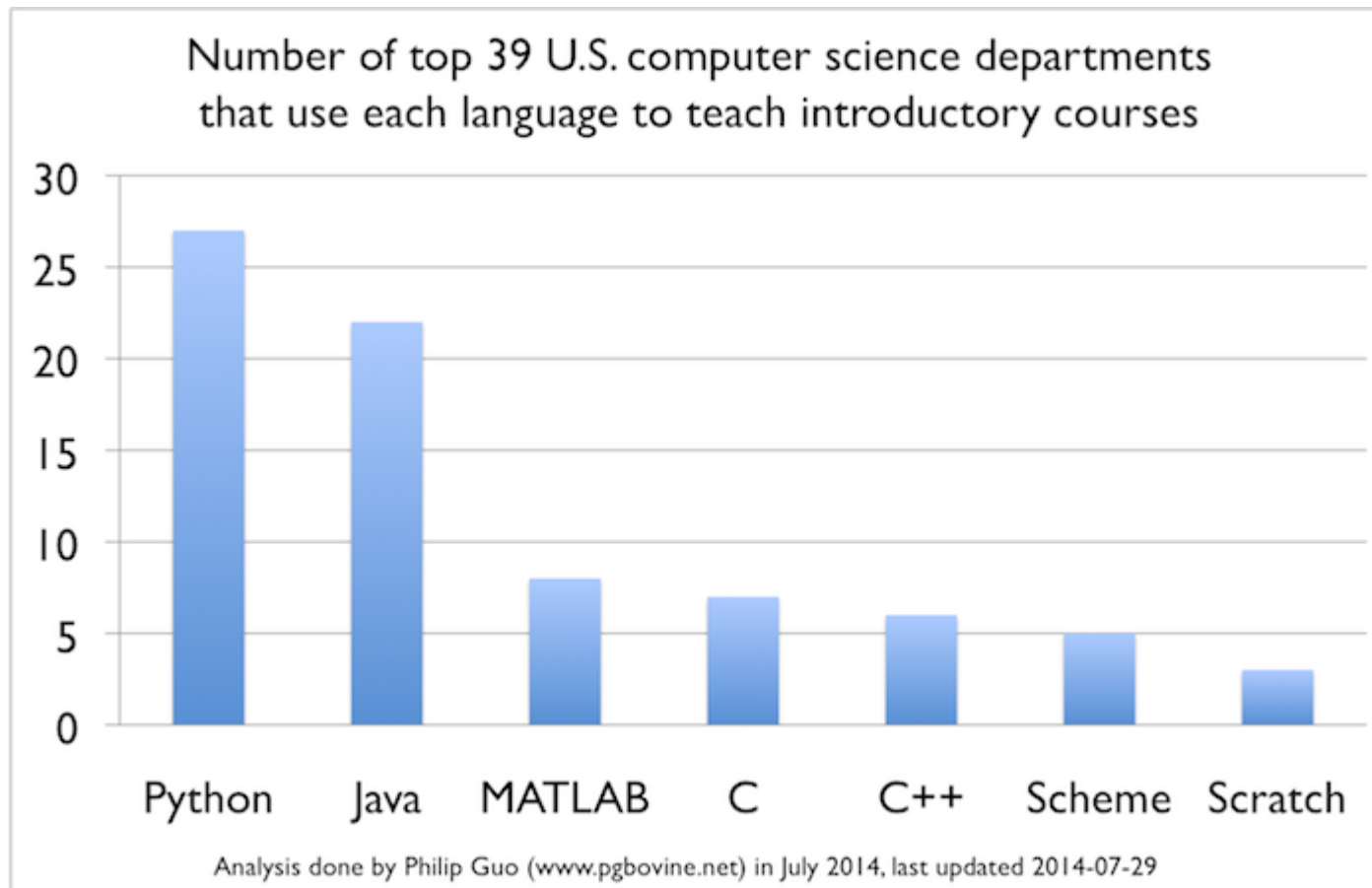


What is Python

- Python is a high-level programming language
 - easy to read and compact code
 - fast prototyping (good for research & development)
 - many things happening behind the scenes (compiling, memory management, dynamic typing, etc.)
- Example of Python code:

```
scores = sum([map(int, l[:-1].split(',')) \
               for l in open('scores.txt', 'r')], [])
```

Python is the most frequently taught programming language in CS departments of universities



Python for Machine Learning

- Several libraries are particularly useful for efficiently implementing ML algorithms and analyzing data (e.g. numpy, matplotlib).
- Many machine learning libraries are developed in Python (e.g. Scikit-Learn, PyBrain, Theano, Tensorflow)



theano



- Fast machine learning libraries written in other languages also have Python bindings (e.g. LibSVM, SHOGUN)

Downloading the Assignments

- Assignments will be digitally signed with GPG.
- Course GPG key is necessary to open the assignments.
- GPG fingerprint:

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6553 153A BB2A 5B93 FF8F 31AF D84D DD30 12C2 9A55

- Verify that the sequence of characters above matches the fingerprint course public key with the command **"gpg --fingerprint"**