Outline

- Introduction to Python
- Exercise 5: Getting started in Python

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Bioinformatics programming languages

Programming languages commonly used in bioinformatics:

- Python (Biopython)
- Perl (BioPerl)
- R (Bioconductor)
- C
- C++
- Java
- Ruby
- MATLAB (Software with GUI)

Scripting languages most commonly used in computational biology

learnpython.org

Why learn a programming language?

Why Python?

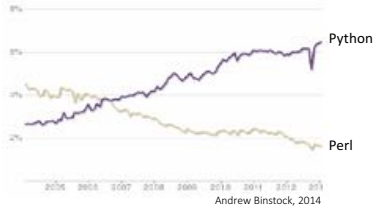
- Very versatile
- Easy to read syntax
- A high level interpreted language – code is processed at runtime.
- Python is a great for beginners as well as advanced programmers.
- Lots of resources for general programing as well as computational biology.
- It's fun
- It's empowering
- It's a desirable skill that looks good on your CV/resume

What is Python good for?

- Can be used to build just about anything (although not always the best or fastest option)!
  - Backend web development
  - Data analysis
  - Productivity/automation tools
  - Stitching programs together into pipelines
  - Games
  - Apps

Python is easily the top general purpose interpreted language

Open source projects



Andrew Binstock, 2014

Exercise 5:

- Download Ex 5 and launch it in Jupyter Notebook

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