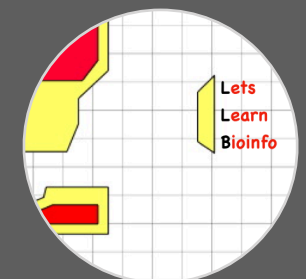
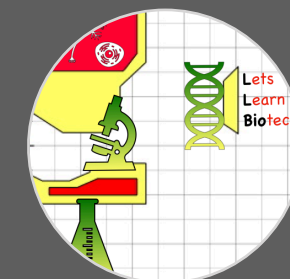
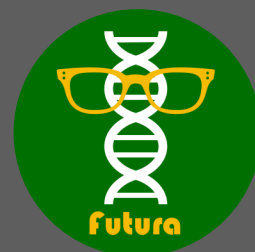




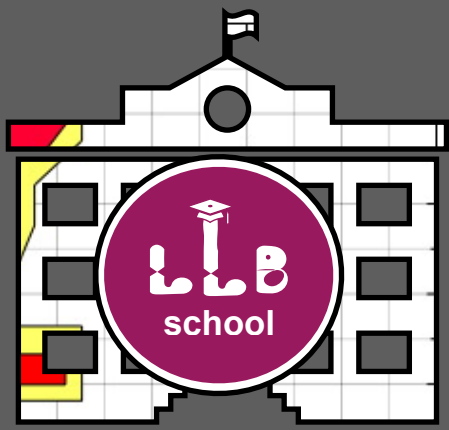
Bringing together Bio/IT scientists of today &

Introduction to Python

Mr. BalaYogi & Mr. Pranav

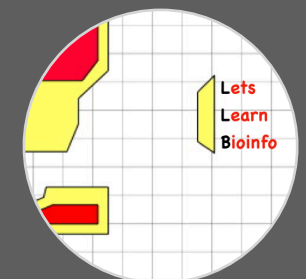
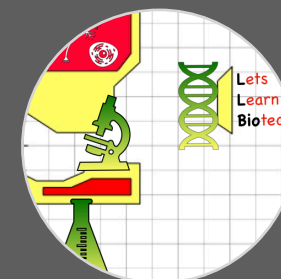
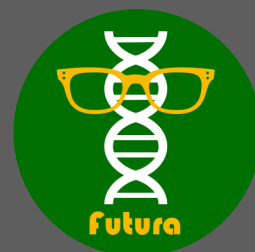


All the lectures of LLB-SCHOOL will be available soon in our telegram and youtube channel called LLB-Scientifically



Important requests for participants

- Kindly switch of your webcam for better buffering
- You are in mute mode
- You could drop your questions either via chat box or 'raise hand' option
- Kindly use your original name for any discussion
- Try your best not to leave the meeting before it ends
- Don't forget to send your feedback via our telegram channels



All the lectures of LLB-SCHOOL will be available soon in our telegram and youtube channel called LLB-Scientifically

Introduction to Python



Session – I
16th, May, 2020 – 2:30PM

Instructor: Mr. Balayogi G

Course updates & discussion: <https://t.me/LetsLearnProgramming>

LLBioinfo: <https://tinyurl.com/LLBioinfo>

LLBiotech: <https://tinyurl.com/LLBiotech>



Bringing together BioIT scientists of today & tomorrow



Agenda

- What is Programming?
- Introduction to Python
- Syntax & Semantics: Data Structures - Statements
- Demonstration



What is Programming?

- Steps to solve a problem
- Computers' Languages
- Programming=Problem solving

Everybody in this
country should
learn to program a
computer, because
it teaches you how
to think

- Steve Jobs -



Steps to become a Programmer

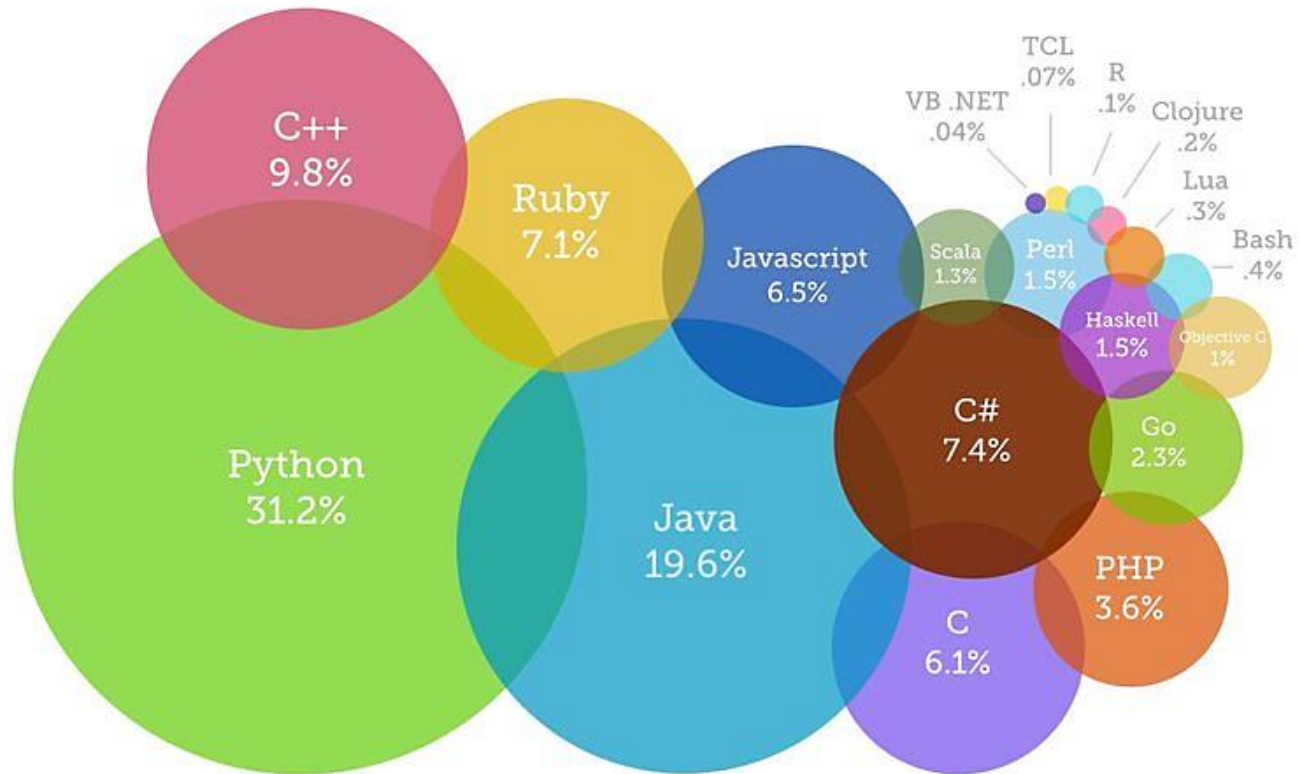


**THE MASTER
HAS FAILED
MORE TIMES THAN
THE BEGINNER
HAS EVEN TRIED**

...

Stephen McCranie

Programming languages





Python Vs R

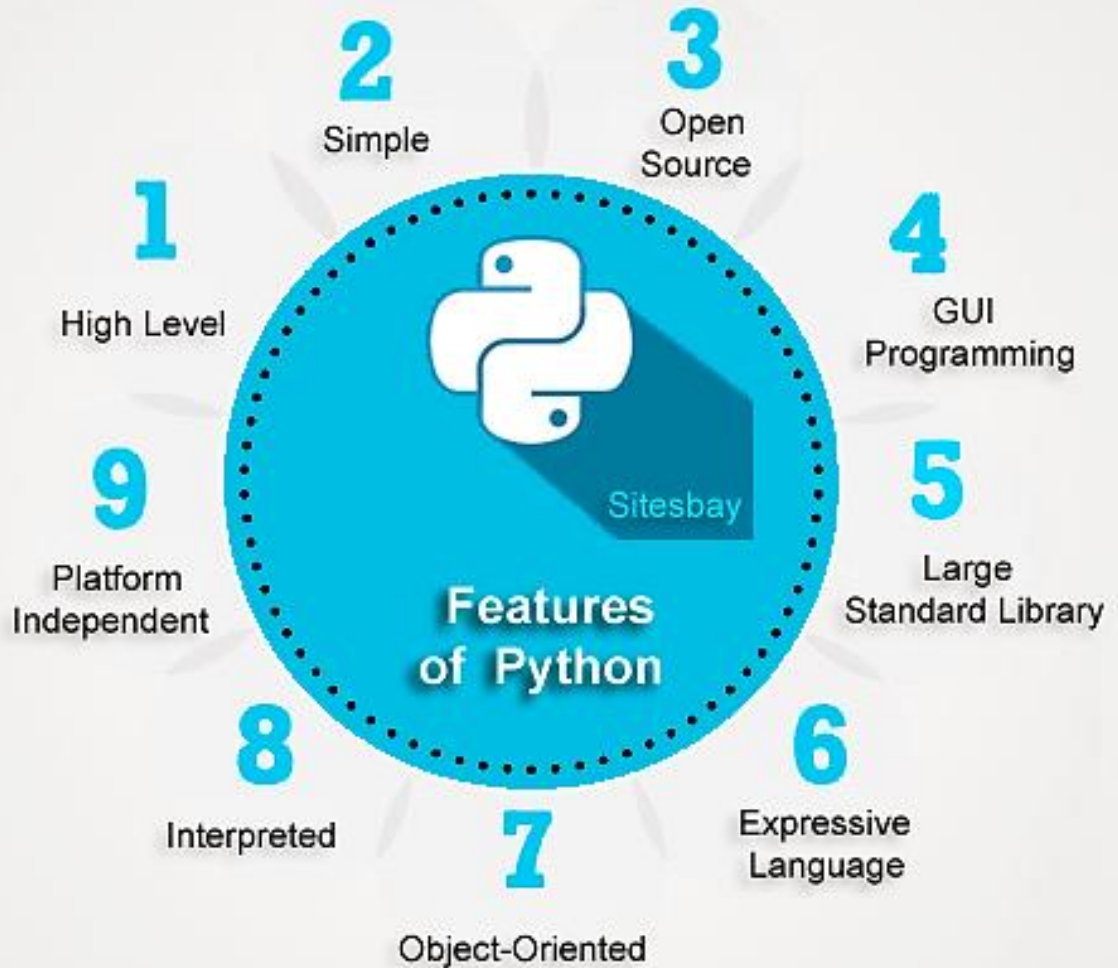


Google Trends: <https://trends.google.com/>

Python Vs R

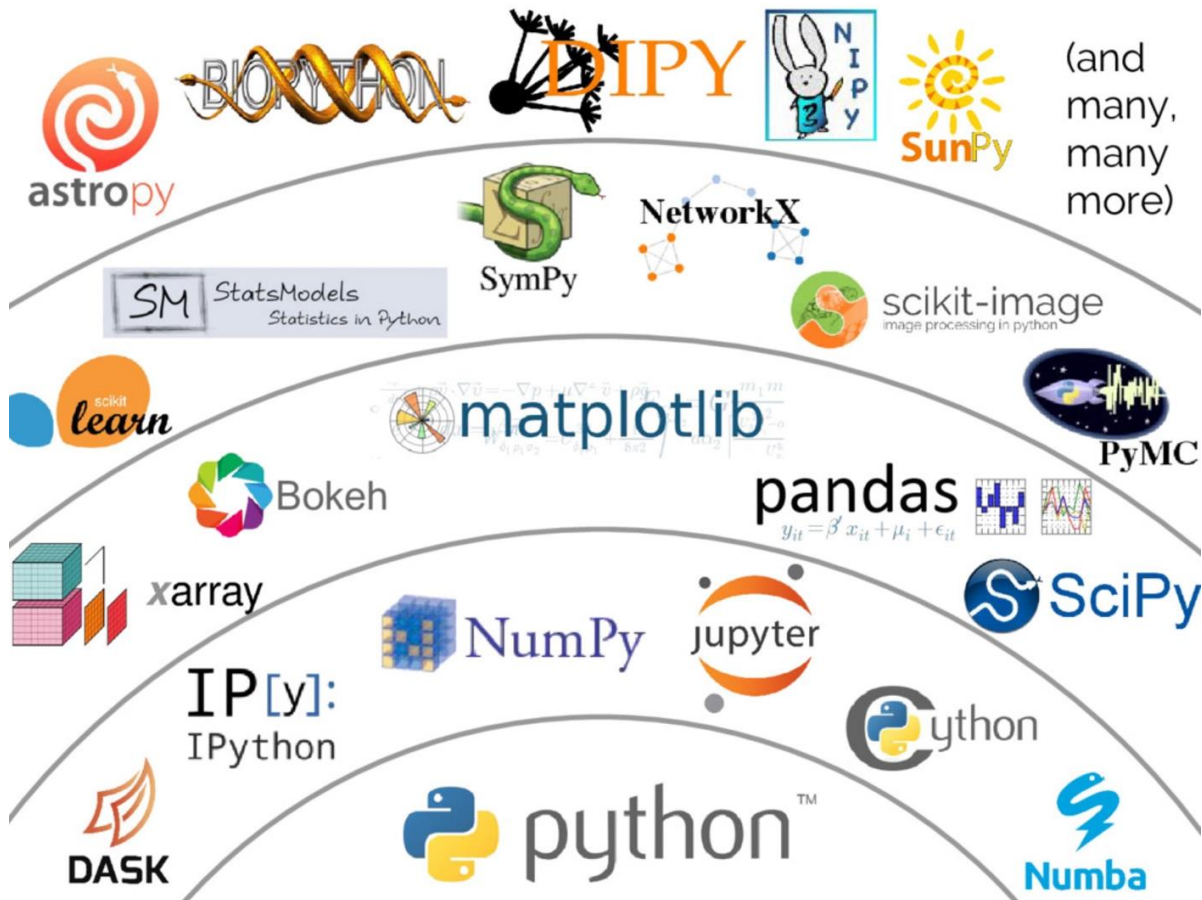
Parameter	R	Python
Objective	Data Analysis and Statistical Modeling	Data Science, Web Development, Embedded Systems
Workability	Consists of many easy to use packages	Can easily perform matrix computation as well as optimization
Integration	Locally Run Programs	Programs integrated with web-app for easy deployment
Database Handling Capacity	Poses problem for handling large dataset	Can handle large data easily without any fault
IDE	Rstudio, R GUI	Spyder, IPython, Jupyter Notebook
Essential Packages and library	ggplot2, tidyverse, caret	Numpy, pandas, scipy, scikit-learn, TensorFlow

Why Python?

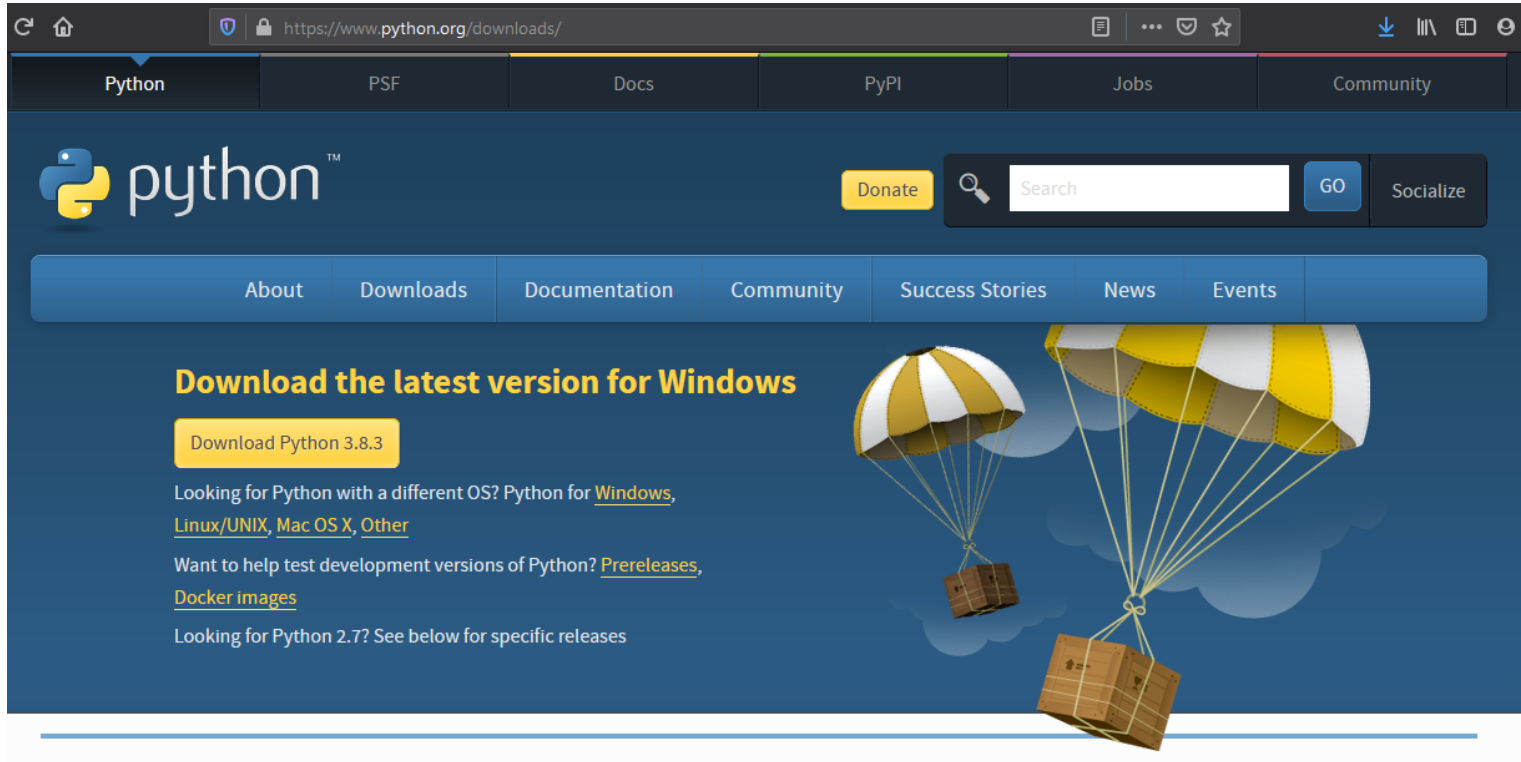


Packages

- Python Package Index (PyPI)
- 1,836,409 releases



Where to get Python



The screenshot shows the Python.org website's download page. The browser's address bar displays <https://www.python.org/downloads/>. The website features a dark blue header with the Python logo and navigation links: Python, PSF, Docs, PyPI, Jobs, and Community. Below the header is a search bar with a 'GO' button and a 'Socialize' button. A secondary navigation bar includes links for About, Downloads, Documentation, Community, Success Stories, News, and Events. The main content area is titled 'Download the latest version for Windows' and features a yellow button labeled 'Download Python 3.8.3'. Below this button, there are links for other operating systems: 'Python for Windows, Linux/UNIX, Mac OS X, Other', 'Prereleases', and 'Docker images'. A note mentions 'Looking for Python 2.7? See below for specific releases'. To the right of the text is an illustration of two parachutes carrying boxes, symbolizing the delivery of Python packages.

Download the latest version for Windows

[Download Python 3.8.3](#)

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [Mac OS X](#), [Other](#)

Want to help test development versions of Python? [Prereleases](#), [Docker images](#)

Looking for Python 2.7? See below for specific releases

<https://www.python.org/downloads/>



Python version

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.18363.778]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Dell>python -V
Python 3.7.1

C:\Users\Dell>
```



Demonstration

- Open cmd
- `pip install jupyter`
- Type “jupyter notebook” in cmd to start notebook