# PYTHON PROGRAMMING 101

## TAKEAWAYS

We covered a lot today! Here are the top five things to remember:

‣ Python is a free, open-source programming language, easy to pick up an learn

‣ Python is used in a variety of applications, from research to industrial and commercial applications

‣ Python comes with "Batteries Included", i.e there is a large collection of modules to make some tasks within a particular problem domain simpler on you.

‣ Python's programming style makes it easy to read and write programs in no time

## VOCAB

| KEY TERM | DEFINITION |
|---|---|
| **Python** | *Programming language created by Guido Van Rossum in 1991* |
| **open-source software** | *Code licensed to allow for anyone to study, change, and distribute the code for any reason* |
| **interpreted programming language** | *Instructions are executed directly, without previously translating a program into machine-language instructions* |
| **Jupyter notebook** | *Human-readable document containing the analysis description and the results (figures, tables, etc..) as well as executable documents which can be run to perform data analysis.* |
| **control structure** | *Block of programming instructions that analyses variables and chooses a direction in which to go based on given parameters* |
| **control flow** | *The order in which individual statements and instructions in a program are executed or evaluated given certain conditions and parameters* |

## RESOURCES

Want to dig deeper?  Check out these resources:

‣ For beginner programmers:

- Learn Python the hard way

- A Beginner's Python Tutorial

‣ For programmers new to python

- Moving to Python From Other Languages

- Python for java developers

‣ For more seasoned programmers:

‣ * Challenge yourself by tackling the Python Challenge