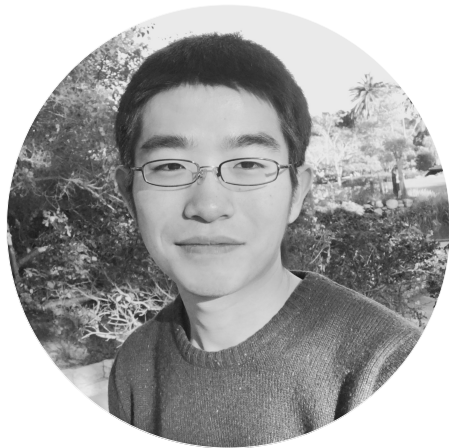


Introduction to Data Visualization with Python

COURSE INTRODUCTION

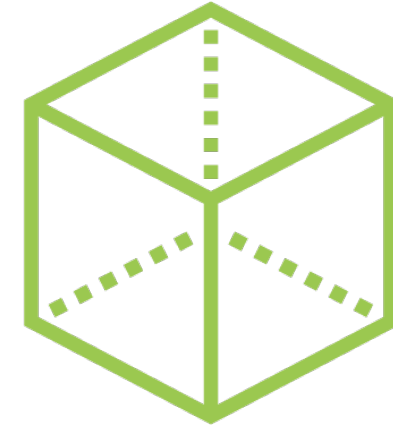
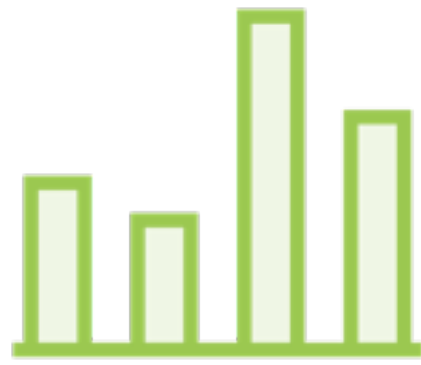


YK Sugishita

SOFTWARE DEVELOPER / DATA SCIENTIST

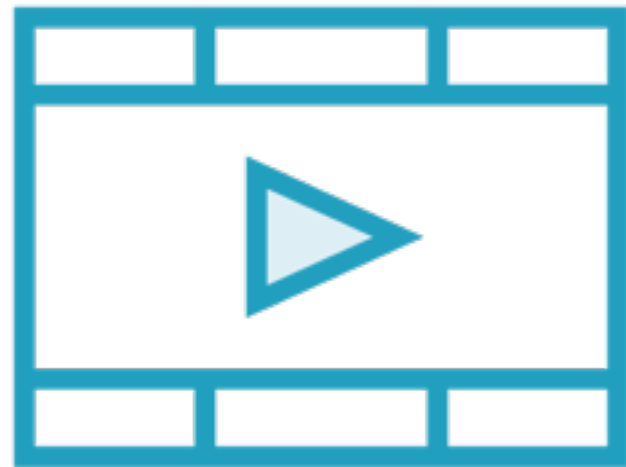
www.csdojo.io

How This Course Is Structured

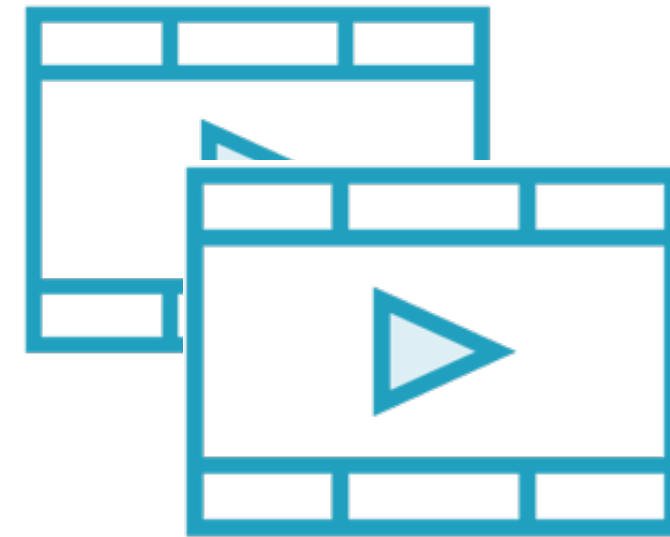


Module 4: Histograms

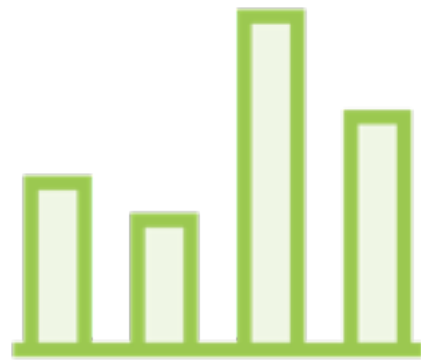
Module 8: Data that is too big



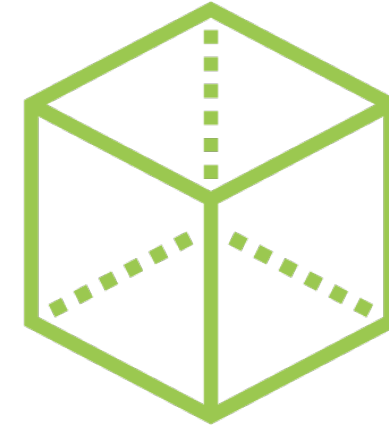
Why and When



How (in Python)



Module 4: Histograms



Module 8: Data that is too big



Module 3: Libraries Intro



Module 9: Practice Problems

Practice with or without your data

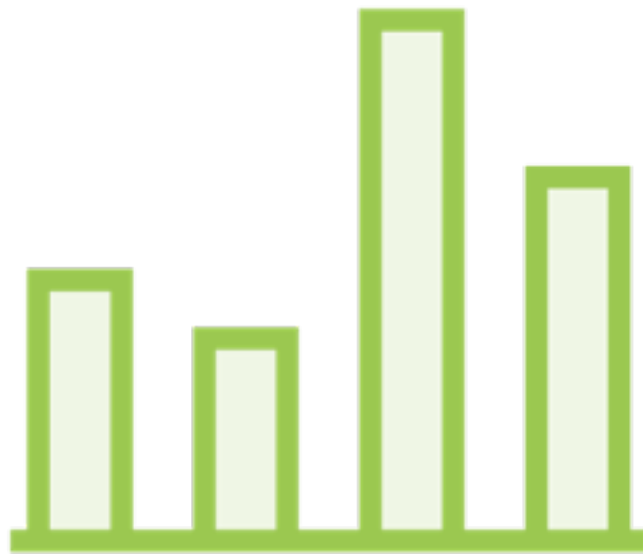
Post comments and questions

Why Data Visualization?

Visualization = First Step in Analysis

- A/B testing, statistical analysis
- Exploratory analysis, data mining
- Machine learning

Why Visualization = First Step?

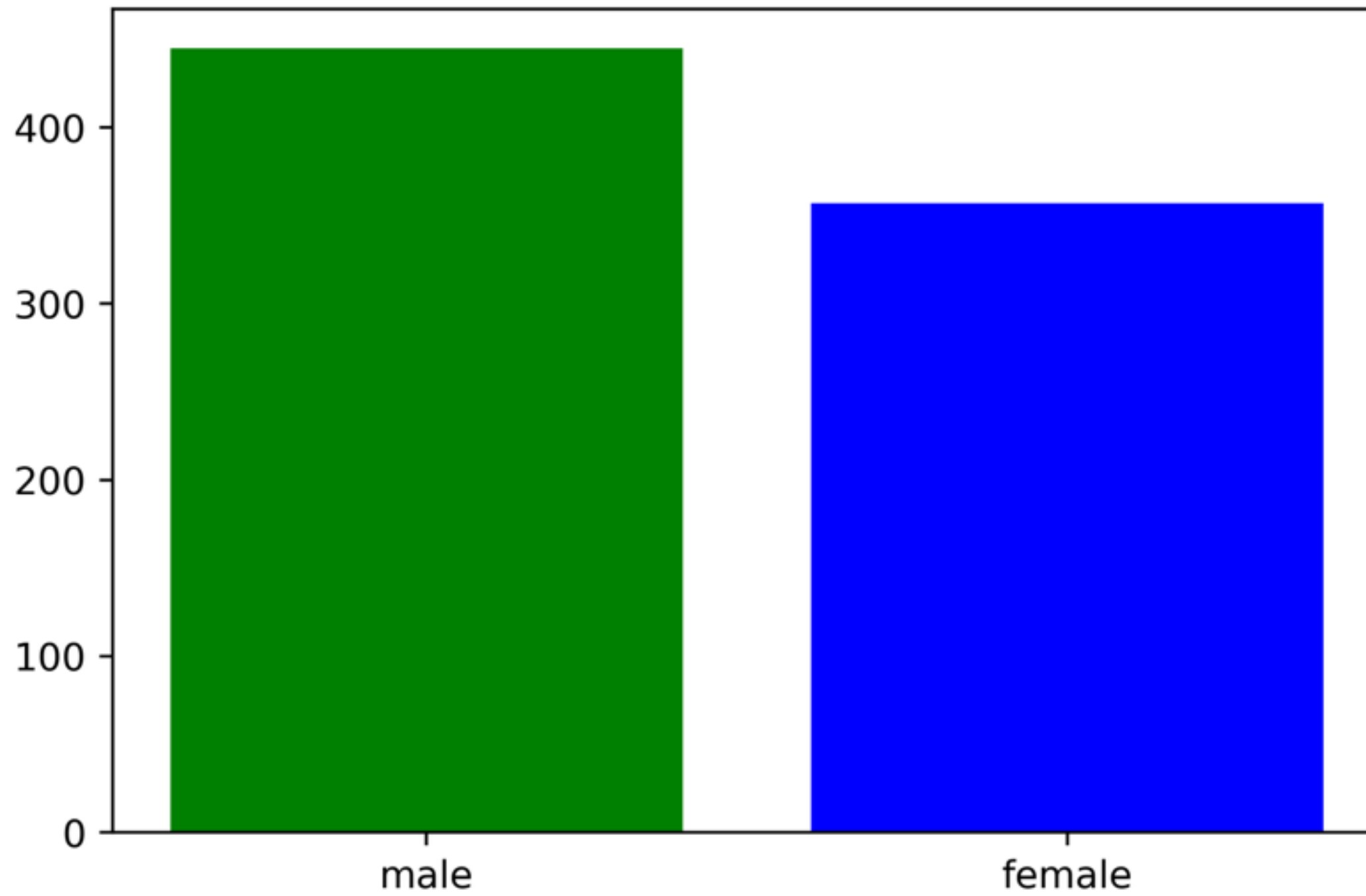


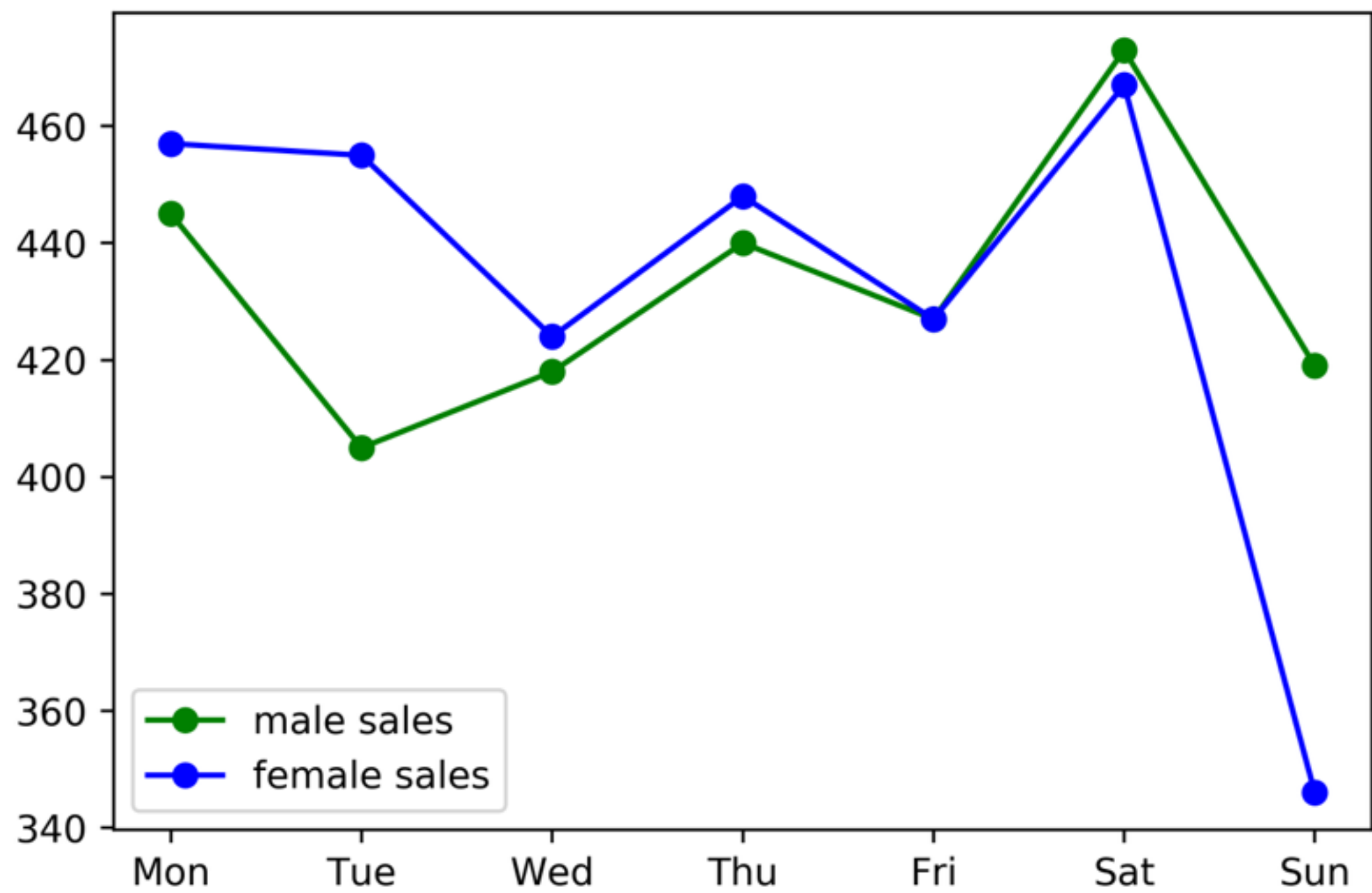
Gives you an intuitive understanding

Quick way to test hypotheses

Gives you different perspectives

Sales Volume on Sunday





Why Python?



```
# Python 3: List comprehensions
>>> fruits = ['Banana', 'Apple', 'Lime']
>>> loud_fruits = [fruit.upper() for fruit in fruits]
>>> print(loud_fruits)
['BANANA', 'APPLE', 'LIME']

# List and the enumerate function
>>> list(enumerate(fruits))
[(0, 'Banana'), (1, 'Apple'), (2, 'Lime')]
```



Compound Data Types

Lists (known as arrays in other languages) are one of the compound data types that Python understands. Lists can be indexed, sliced and manipulated with other built-in functions. [More about lists in Python 3](#)

1

2

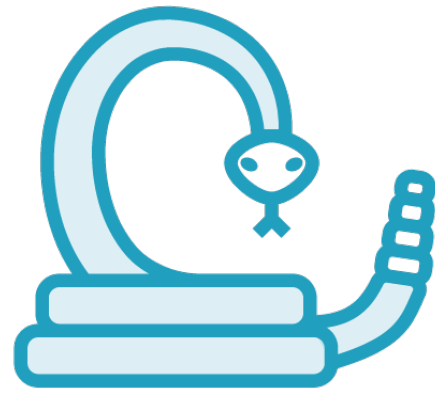
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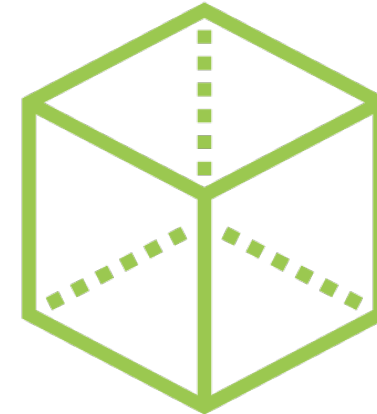
5

Python is a programming language that lets you work quickly and integrate systems more effectively. [>>> Learn More](#)

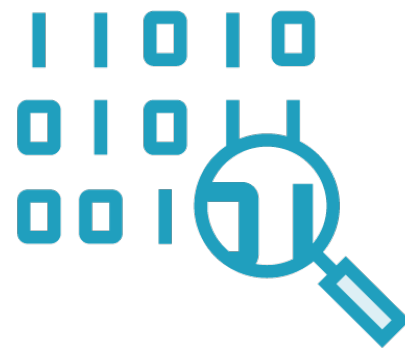
Python Libraries



NumPy



SciPy



Pandas



Matplotlib

Django makes it easier to build better Web apps more quickly and with less code.

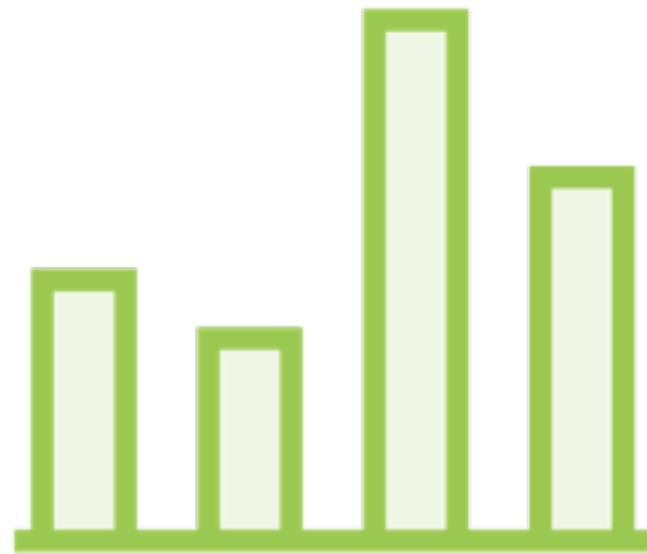
[Get started with Django](#)

Meet Django

[Download latest release: 1.11](#)

Who Is This Course For?

Who Is This Course For?



- **Software Developer**
- **Data Scientist / Data Analyst**
- **Other IT Professionals**

Prerequisites

- Familiarity with a C-like language
(C++, Java, JavaScript, Ruby, Python, etc.)
- Basic knowledge in Python is preferred but not required
- No prior data visualization or statistics knowledge is required