

Week 4

More Python

# Python Data Types

## Simple

- int
- float
- bool
- str

## Complex

- range (10) (2, 12) (1, 20, 2)
- list [1, 3, 4, 4, 4, 5]
- set {1, 3, 4, 4, 4, 5}
- dict d={} d ['henry'] = 35
- tuple (0, 0)

# What is an **API** (and why are they important)?

- According to API Academy, there are several reasons why businesses should consider launching APIs. They offer the potential to:
  - Increase revenue
  - Extend customer reach and value
  - Support sales and marketing activities
  - Stimulate business and technical innovation
  - Ease integration of backend data and applications
  - <https://www.apiacademy.co/series/api-strategy>

What

<https://www.youtube.com/watch?v=s7wmiS2mSXY>

# Assignment 4: *prices.py*

Recall that Alpha Vantage offers a **TIME\_SERIES\_INTRADAY** API, which allows you to get a CSV file with the daily prices of a stock every 1/5/15/30/60 minutes. You can query that API with code like we saw in [quote.py](#). **\*\*\*NEXT\*\*\*** in [prices.py](#), implement a program that

1. prompts the user for a stock symbol and
2. outputs, line by line, a date followed by the close price of that stock on that date for at least 100 (or more) days
3. Your first line of output, though, should be for the date on which the market most recently closed.
4. Execute with: `API_KEY=YOURS python prices.py STOCK-SYMB`

# Examples of "objects"



`sit()`

`roll_over()`

`speak()`

`eat()`

`compute_area()`

`draw(RED)`

`perimeter()`



`get_balance()`

`deposit(5000)`

`withdraw(800)`

# Dates

<b>Su</b>	<b>Mo</b>	<b>Tu</b>	<b>We</b>	<b>Th</b>	<b>Fr</b>	<b>Sa</b>
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
31						

# Assignment 4: *Employees*

Modify `employees.py` in such a way that the program will

1. output —verbatim — `Id,ManagerId,LastName,FirstName`, on a line of its own, and will
2. output, for each employee in `employees.csv`, the unique identifier of the employee, followed by a comma, the unique identifier of the employee's manager, followed by a comma, the employee's last name, followed by a comma, and the employee's first name.
3. In other words, your program (named `employeesSolution.py`) should output:

```
Id,ManagerId,LastName,FirstName
1,,Adams,Andrew
2,6,Callahan,Laura
3,1,Edwards,Nancy
4,3,Johnson,Steve
5,6,King,Robert
6,1,Mitchell,Michael
7,3,Park,Margaret
8,3,Peacock,Jane
```

# Manifesto for Agile Software Development

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

*That is, while there is value in the items on the right, we value the items on the left more.*



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<https://www.youtube.com/watch?v=K7YMEFjh724>