

[**Kevin Lee (Sub Instructor)**](https://app.slack.com/team/U02GRRN8V54)  [8:14 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634084073011200)

<https://python.plainenglish.io/feature-engineering-with-map-apply-and-lambda-functions-in-pandas-454ec2048eed?sk=46eb9532701341e2fb74dd1d4648cd23> (edited)

Medium**Medium**

[**Feature Engineering  with .map(), .apply(), and Lambda Functions in Pandas**](https://python.plainenglish.io/feature-engineering-with-map-apply-and-lambda-functions-in-pandas-454ec2048eed?sk=46eb9532701341e2fb74dd1d4648cd23)

Tutorial on Applying Functions to Pandas DataFrames

**Reading time**

4 min read

Nov 24th, 2020 (129 kB)

<https://python.plainenglish.io/feature-engineering-with-map-apply-and-lambda-functions-in-pandas-454ec2048eed?sk=46eb9532701341e2fb74dd1d4648cd23>



[**Kevin Lee (Sub Instructor)**](https://app.slack.com/team/U02GRRN8V54)  [8:55 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634086513011500)

<https://python.plainenglish.io/better-text-preprocessing-w-regex-774d27ee0e6d?sk=b7f724918fa4c5bd836252c99579b627> (edited)

Medium**Medium**

[**Better Text Preprocessing in Python with Regex**](https://python.plainenglish.io/better-text-preprocessing-w-regex-774d27ee0e6d?sk=b7f724918fa4c5bd836252c99579b627)

10 Guided Examples to Help You Understand Regex

**Reading time**

6 min read

Oct 21st, 2020 (48 kB)

<https://python.plainenglish.io/better-text-preprocessing-w-regex-774d27ee0e6d?sk=b7f724918fa4c5bd836252c99579b627>

**Wednesday, October 13th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [3:25 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634153106012200)

<https://www.dataquest.io/wp-content/uploads/2019/03/python-regular-expressions-cheat-sheet.pdf>

:+1:1

[3:25](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634153154012400)

<https://www.geeksforgeeks.org/python-regex-cheat-sheet/>

GeeksforGeeks**GeeksforGeeks**

[**Python Regex Cheat Sheet - GeeksforGeeks**](https://www.geeksforgeeks.org/python-regex-cheat-sheet/)

A Computer Science portal for geeks. It contains well written, well thought and well explained computer science and programming articles, quizzes and practice/competitive programming/company interview Questions.

Jan 20th

**Friday, October 15th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:11 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634332304012800)

<https://docs.python.org/3/howto/regex.html>

**Monday, October 18th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:56 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634594160013000)

<https://docs.sqlalchemy.org/en/14/dialects/>

[5:59](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634594393013200)

<https://www.sqlalchemy.org/features.html>

:white_check_mark:3



[**Taimur Ahmad Khan**](https://app.slack.com/team/U02BB29BTSM)  [8:06 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634601974013700)

<https://stackoverflow.com/questions/1052148/group-by-count-function-in-sqlalchemy>

Stack Overflow**Stack Overflow**

[**Group by & count function in sqlalchemy**](https://stackoverflow.com/questions/1052148/group-by-count-function-in-sqlalchemy)

I want a "group by and count" command in sqlalchemy. How can I do this?

:white_check_mark:1:+1::skin-tone-3::+1:2



[**Goutham Ram Aiyappan**](https://app.slack.com/team/U02BDS16QTF)  [8:09 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634602163014100)

Amazing. thanks Taimur

:raised_hands:1

**Wednesday, October 20th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [4:45 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634762714015600)

The following link is in reference to a question from our last session on Monday about using all():  
<https://stackoverflow.com/questions/1078383/sqlalchemy-difference-between-query-and-query-all-in-for-loops>

Stack Overflow**Stack Overflow**

[**Sqlalchemy - Difference between query and query.all in for loops**](https://stackoverflow.com/questions/1078383/sqlalchemy-difference-between-query-and-query-all-in-for-loops)

I would like to ask whats the difference between for row in session.Query(Model1): pass and for row in session.Query(Model1).all(): pass is the first somehow an iterator bombarding your...



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:13 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634764396016500)

**@channel**, Here’s a Chrome extension I use that nicely formats JSON data:  
<https://chrome.google.com/webstore/detail/json-formatter/bcjindcccaagfpapjjmafapmmgkkhgoa>[**chrome.google.com**](http://chrome.google.com/)  
[**JSON Formatter**](https://chrome.google.com/webstore/detail/json-formatter/bcjindcccaagfpapjjmafapmmgkkhgoa)  
Makes JSON easy to read. Open source. (edited)

chrome.google.com**chrome.google.com**

[**JSON Formatter**](https://chrome.google.com/webstore/detail/json-formatter/bcjindcccaagfpapjjmafapmmgkkhgoa)

Makes JSON easy to read. Open source.



[**Érico Sabino**](https://app.slack.com/team/U02B4TEUKSP)  [7:40 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634773234017200)

[@Sal Hobbi - Instructor](https://utorvirtdata-doe5678.slack.com/team/U02ABPZTCGJ) I got it:"Python sequence slice addresses can be written as a[start:end:step] and any of start, stop or end can be dropped. a[::3] is every third element of the sequence."<https://stackoverflow.com/questions/3453085/what-is-double-colon-in-python-when-subscripting-sequences> (edited)

Stack Overflow**Stack Overflow**

[**What is :: (double colon) in Python when subscripting sequences?**](https://stackoverflow.com/questions/3453085/what-is-double-colon-in-python-when-subscripting-sequences)

I know that I can use something like string[3:4] to get a substring in Python, but what does the 3 mean in somesequence[::3]?

:+1:2:raised_hands:1



[**shady ishak**](https://app.slack.com/team/U02CA52S108)  [7:41 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1634773274017800)

Thank you :)

:+1:1

**Monday, October 25th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [6:43 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635201797000900)

**@channel**, this page has all the tools required for this week:  
<https://courses.bootcampspot.com/courses/769/pages/10-dot-1-1-install-your-tools?module_item_id=269238>

**Wednesday, October 27th**



[**Mohamed El-Gazzar**](https://app.slack.com/team/U02B358J0SW)  [9:18 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635383886001600)

<https://www.youtube.com/watch?v=-bt_y4Loofg&ab_channel=Fireship> I found this useful. I hope you guys do too

[YouTube](https://www.youtube.com/)[**YouTube**](https://www.youtube.com/) | [Fireship](https://www.youtube.com/c/Fireship)

[**MongoDB in 100 Seconds**](https://www.youtube.com/watch?v=-bt_y4Loofg&amp;ab_channel=Fireship)

:raised_hands:2

**Thursday, October 28th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [12:16 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635437762002300)

Flask templating language:  
<https://flask.palletsprojects.com/en/2.0.x/templating/> (edited)

**Monday, November 1st**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [4:19 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635797958003100)

**@channel** resources for this week:

3 files

**[JavaScript\_Data\_Functions.pdf](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf)**

[58 kB PDF](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf)

[58 kB — Click to view](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02LH7Q6SGG/javascript_data_functions.pdf)

**[JavaScript\_Reference\_Guide.pdf](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf)**

[149 kB PDF](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf)

[149 kB — Click to view](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR8HWJ2/javascript_reference_guide.pdf)

**[ES6\_Reference\_Guide.pdf](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf)**

[99 kB PDF](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf)

[99 kB — Click to view](https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf?origin_team=T02AF75EZ25&origin_channel=C02A2J89TQA" \t "https://utorvirtdata-doe5678.slack.com/files/U02ABPZTCGJ/F02KLR9E0TG/es6_reference_guide.pdf)



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [4:25 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635798306004100)

**@channel**… and more resources …:  
<https://github.com/getify/You-Dont-Know-JS>  
<https://watchandcode.com/p/practical-javascript> (requires an account - it’s free)

GitHub**GitHub**

[**GitHub - getify/You-Dont-Know-JS: A book series on JavaScript. @YDKJS on twitter.**](https://github.com/getify/You-Dont-Know-JS)

A book series on JavaScript. @YDKJS on twitter. Contribute to getify/You-Dont-Know-JS development by creating an account on GitHub. (90 kB)

<https://github.com/getify/You-Dont-Know-JS>

**watchandcode.com**

[**Practical JavaScript**](https://watchandcode.com/p/practical-javascript) (50 kB)

<https://watchandcode.com/p/practical-javascript>



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:15 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635801358005500)

**@channel**, For those who are interested, in my Visual Studio Code I use the following extension to run HTML pages:<https://marketplace.visualstudio.com/items?itemName=ritwickdey.LiveServer>

**marketplace.visualstudio.com**

[**Live Server - Visual Studio Marketplace**](https://marketplace.visualstudio.com/items?itemName=ritwickdey.LiveServer)

Extension for Visual Studio Code - Launch a development local Server with live reload feature for static & dynamic pages

:dart:1



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:56 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635803760006200)

**@channel**, … one more …  
<https://htmlcheatsheet.com/js/>

htmlcheatsheet.com**htmlcheatsheet.com**

[**JavaScript (JS) Cheat Sheet Online**](https://htmlcheatsheet.com/js/)

JavaScript Cheat Seet contains useful code examples on a single page. Not just a PDF because it's interactive! Find code for JS loops, variables, objects and (87 kB)

<https://htmlcheatsheet.com/js/>

:raised_hands::raised_hands::skin-tone-3:3

[5:57](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635803845006900)

**@channel**… speaking of one more …  
<https://scrimba.com/learn/learnjavascript>

**Scrimba**

[**Learn JavaScript for free - 7-hour interactive tutorial**](https://scrimba.com/learn/learnjavascript)

Learn the basics of JavaScript by solving 140+ interactive coding challenges and building three fun projects. (11 kB)

<https://scrimba.com/learn/learnjavascript>



[**Rebecca Pham - Assistant Instructor**](https://app.slack.com/team/U02DJ0NQE6M)  [6:56 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635807379007300)

<https://www.hackerrank.com/>

hackerrank.com**hackerrank.com**

[**HackerRank**](https://www.hackerrank.com/)

HackerRank is the market-leading technical assessment and remote interview solution for hiring developers. Learn how to hire technical talent from anywhere! (68 kB)

<https://www.hackerrank.com/>

:raised_hands::skin-tone-5::raised_hands:2

**Wednesday, November 3rd**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [4:59 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635973183008200)

<https://d3js.org/>

d3js.org**d3js.org**

[**D3.js - Data-Driven Documents**](https://d3js.org/)

D3 is a JavaScript library for visualizing data with HTML, SVG, and CSS. (296 kB)

<https://d3js.org/>



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [9:31 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1635989518010500)

During our session tonight we talked about Events such as “click” and “change”. There are many other events in addition to those two. Here is a list of events as a reference. It is overwhelming so keep it as a reference!<https://developer.mozilla.org/en-US/docs/Web/Events#event_listing>

developer.mozilla.org**developer.mozilla.org**

[**Event reference | MDN**](https://developer.mozilla.org/en-US/docs/Web/Events#event_listing)

Events are fired to notify code of "interesting changes" that may affect code execution. These can arise from user interactions such as using a mouse or resizing a window, changes in the state of the underlying environment (e.g. low battery or media events from the operating system), and other causes.

<https://developer.mozilla.org/en-US/docs/Web/Events#event_listing>

**Monday, November 8th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:45 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1636407919011000)

<https://plotly.com/javascript/>

**plotly.com**

[**Plotly JavaScript Graphing Library**](https://plotly.com/javascript/)

A free open source interactive javascript graphing library. Plotly.js is built on d3.js and webgl and supports over 20 types of interactive charts. (54 kB)

<https://plotly.com/javascript/>

**Saturday, November 13th**

Pinned by Ivan Coelho



[**LSM - Kyla**](https://app.slack.com/team/U02AKPSR3ED)  [1:03 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1636823008011600)

**@here** Hi everyone! Here are some of the resources that Piro recommends based on what he talked about:Learning resources for next steps: SQL>>>>

1. Download SQL Server Express from here (bottom right corner) and install it: <https://www.microsoft.com/en-ca/sql-server/sql-server-downloads>
2. Download SQL Server Management Studio (to connect to it): <https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver15>
3. Download a sample database (AdventureWorks LT2008) and install it using the steps on this page: <https://docs.microsoft.com/en-us/sql/samples/adventureworks-install-configure?view=sql-server-ver15&tabs=ssms>
4. Run through the exercises in this book from PDF page 1 to page 48: <https://link.springer.com/content/pdf/bbm%3A978-1-4302-2462-4%2F1.pdf> (it’s best that you do each exercise three times; one with the book, one by peeking, and one by yourself)

Power BI>>>>

1. Download Power BI Desktop from here: <https://powerbi.microsoft.com/en-ca/desktop/>
2. It’s best you follow the guided learning on this page: <https://docs.microsoft.com/en-us/learn/powerplatform/power-bi>

It shouldn’t take you too long to go through them, but super important to go through all these modules. It’s super important to focus on DAX and data models.  Python>>>>

1. I would study something on pandas: maybe do one or two of these: <https://pandas.pydata.org/pandas-docs/stable/getting_started/tutorials.html>
2. I would probably practice on Google Colab: <https://colab.research.google.com/notebooks/mlcc/intro_to_pandas.ipynb>
3. Check out other topics, such as web scraping with BeautifulSoup, building web apps with Flask, and querying SQL with SQLAlchemy.

Azure>>>>

1. Start by reading what you can do with Python on Azure: <https://azure.microsoft.com/en-us/develop/python/>
2. Then get a free trial to Azure here: <https://azure.microsoft.com/en-us/free/>
3. Complete the tutorials on Azure Data Factory: <https://docs.microsoft.com/en-us/azure/data-factory/data-factory-tutorials>
4. Complete the tutorials on Azure Databricks: <https://docs.microsoft.com/en-us/azure/databricks/delta/>
5. Complete the tutorials on Azure Synapse Analytics: <https://docs.microsoft.com/en-us/azure/synapse-analytics/get-started>
6. Understand the various Azure Data Storage products: Azure Data Lake, Azure Blob storage, Azure Table storage, Azure File Storage;
7. Read and understand Azure Architecture patterns pertaining to data and analytics: <https://docs.microsoft.com/en-us/azure/architecture/browse/?azure_categories=ai-machine-learning%2Canalytics%2Cdatabases%2Cintegration>

:raised_hands:**8**

**Monday, November 15th**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [5:37 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1637012238013600)

<https://leafletjs.com/reference.html#tilelayer>



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [10:16 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1637029002013900)

<https://www.latlong.net/>

latlong.net**latlong.net**

[**Latitude and Longitude Finder on Map Get Coordinates**](https://www.latlong.net/)

Lat long is a geographic tool which helps you to get latitude and longitude of a place or city and find gps coordinates on map, convert lat long, gps, dms and utm.

:white_check_mark:1

**Today**



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [7:01 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1637190103014400)

<https://en.wikipedia.org/wiki/GeoJSON>

[Wikipedia](https://en.wikipedia.org/)[**Wikipedia**](https://en.wikipedia.org/)

[**GeoJSON**](https://en.wikipedia.org/wiki/GeoJSON)

GeoJSON is an open standard format designed for representing simple geographical features, along with their non-spatial attributes. It is based on the JSON format.  
The features include points (therefore addresses and locations), line strings (therefore streets, highways and boundaries), polygons (countries, provinces, tracts of land), and multi-part collections of these types. GeoJSON features need not represent entities of the physical world only; mobile routing and navigation apps, for example, might describe their service coverage using GeoJSON.The GeoJSON format differs from other GIS standards in that it was written and is maintained not by a formal standards organization, but by an Inte… Show more



[**Sal Hobbi - Instructor**](https://app.slack.com/team/U02ABPZTCGJ)  [7:11 PM](https://utorvirtdata-doe5678.slack.com/archives/C02A2J89TQA/p1637190705014700)

<https://leafletjs.com/reference-1.6.0.html#geojson>