

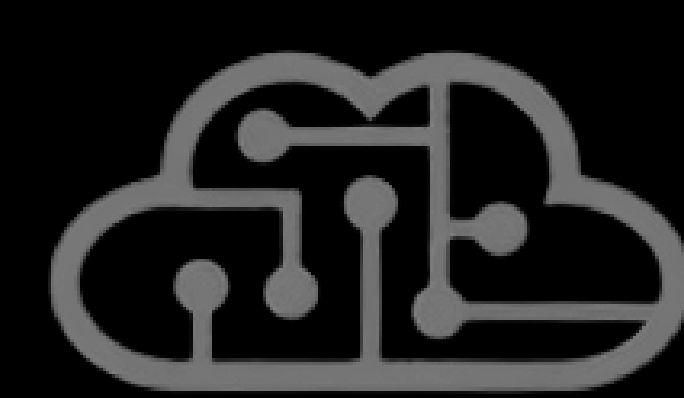


**MUST
HAVE**



Jupyter

**JUPYTER
NOTEBOOK
EXTENSIONS**



▼ Imports

```
In [2]: import spacy
```

executed in 251ms, finished 12:24:05 2018-03-02

▼ Initialization

```
In [4]: nlp = spacy.load('en', disable=['parser'])
```

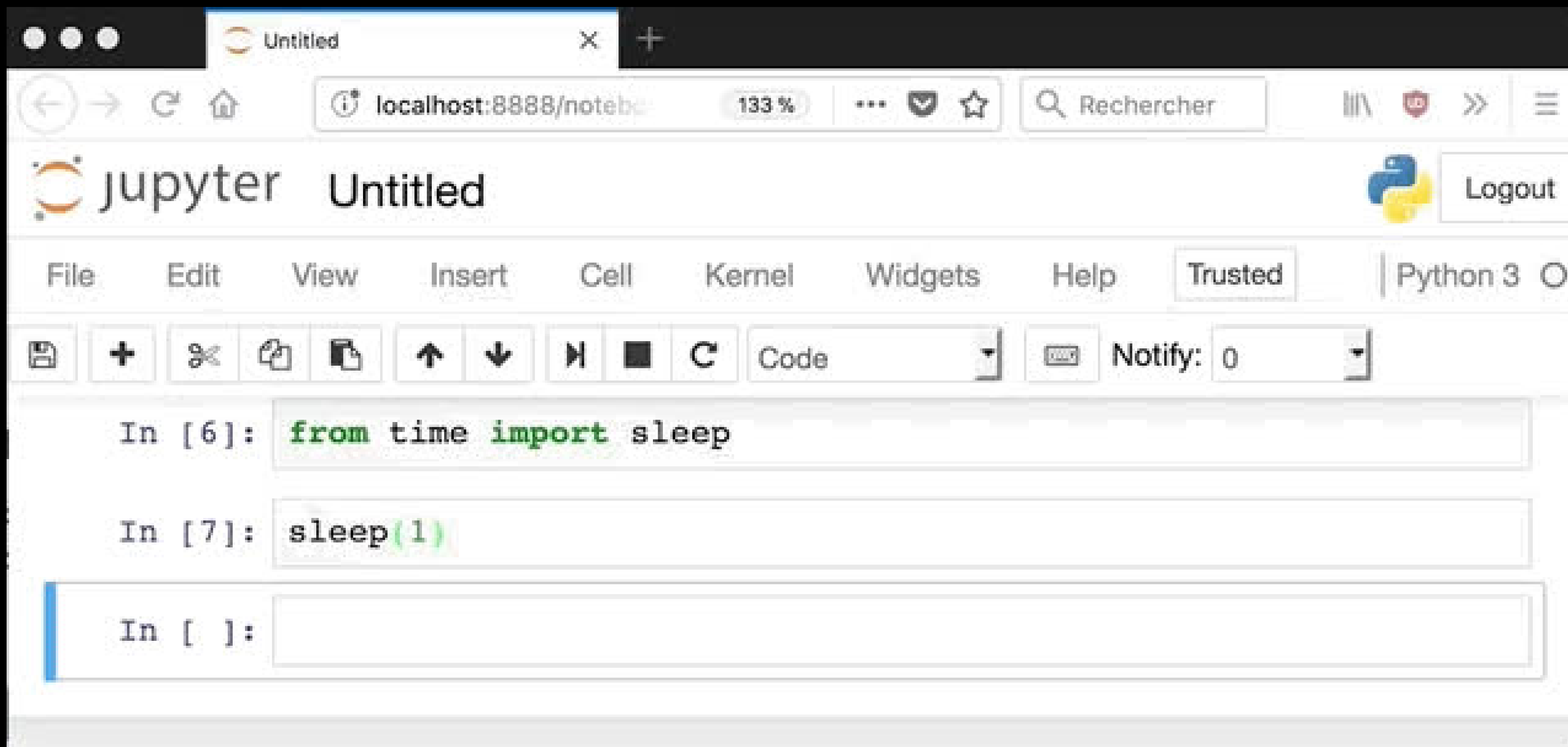
executed in 386ms, finished 12:25:00 2018-03-02

▼ Example 1

```
In [7]: doc = nlp(u'Apple is looking at buying U.K. startup for $1 bill  
for ent in doc.ents:  
    print(ent.text, ent.start_char, ent.end_char, ent.label_)
```

Collapsible headings

Very useful when dealing with large notebooks, collapsible headings allow you to collapse some parts of the notebooks.



The screenshot shows a Jupyter Notebook interface in a browser window. The browser address bar shows 'localhost:8888/notebook'. The notebook title is 'Untitled'. The interface includes a menu bar with 'File', 'Edit', 'View', 'Insert', 'Cell', 'Kernel', 'Widgets', 'Help', 'Trusted', and 'Python 3'. Below the menu bar is a toolbar with icons for file operations and execution. The notebook content consists of three code cells:

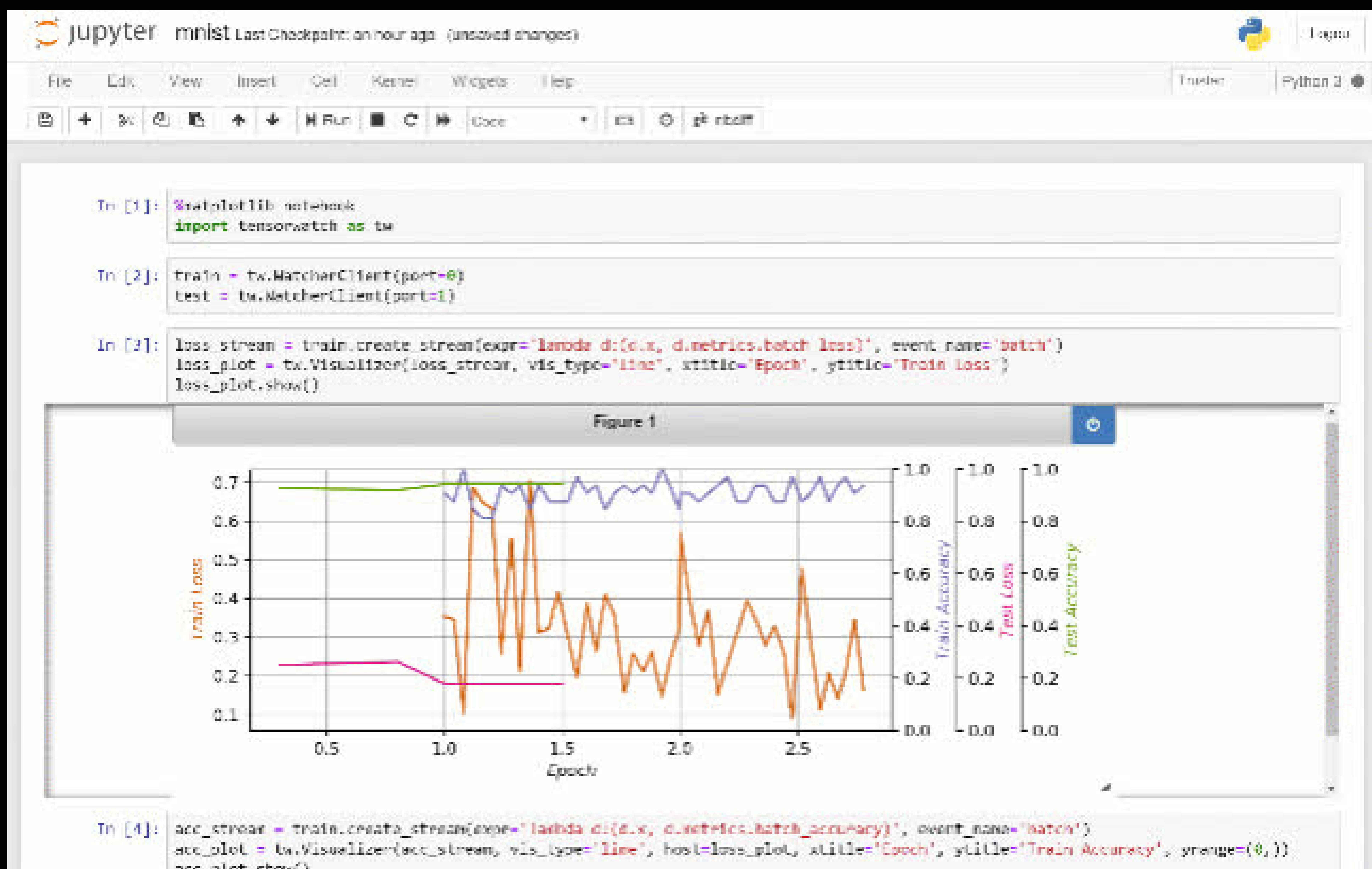
```
In [6]: from time import sleep
```

```
In [7]: sleep(1)
```

```
In [ ]:
```

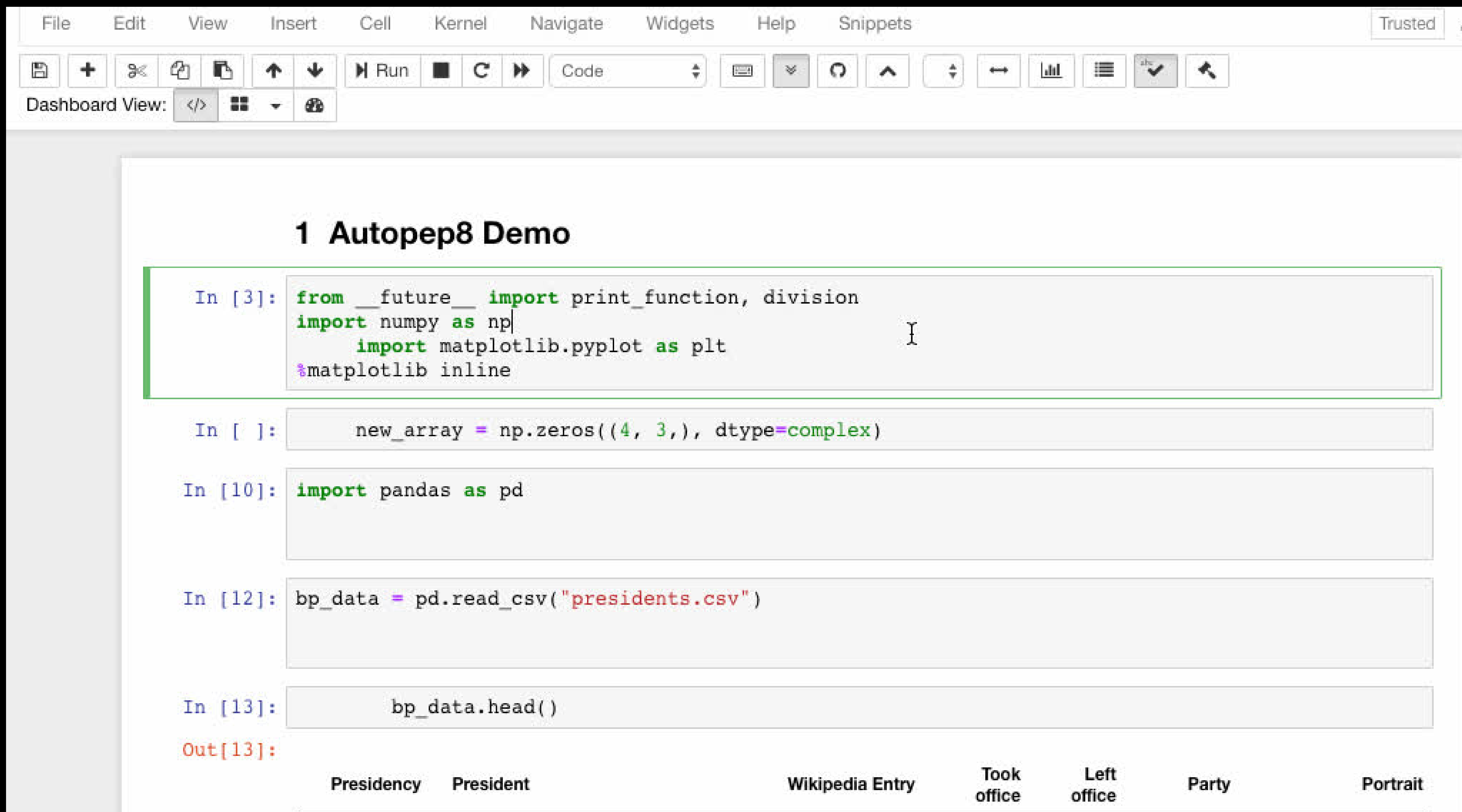
Jupyternotify

For the long-running task, the notify extension sends a notification to the user upon completion of a potentially long-running cell via a browser push notification.



TensorWatch

TensorWatch is a debugging and visualization tool designed to show real-time visualizations of your machine learning training and performs several other key analysis tasks for your models and data.



```
In [3]: from __future__ import print_function, division
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline

In [ ]: new_array = np.zeros((4, 3, ), dtype=complex)

In [10]: import pandas as pd

In [12]: bp_data = pd.read_csv("presidents.csv")

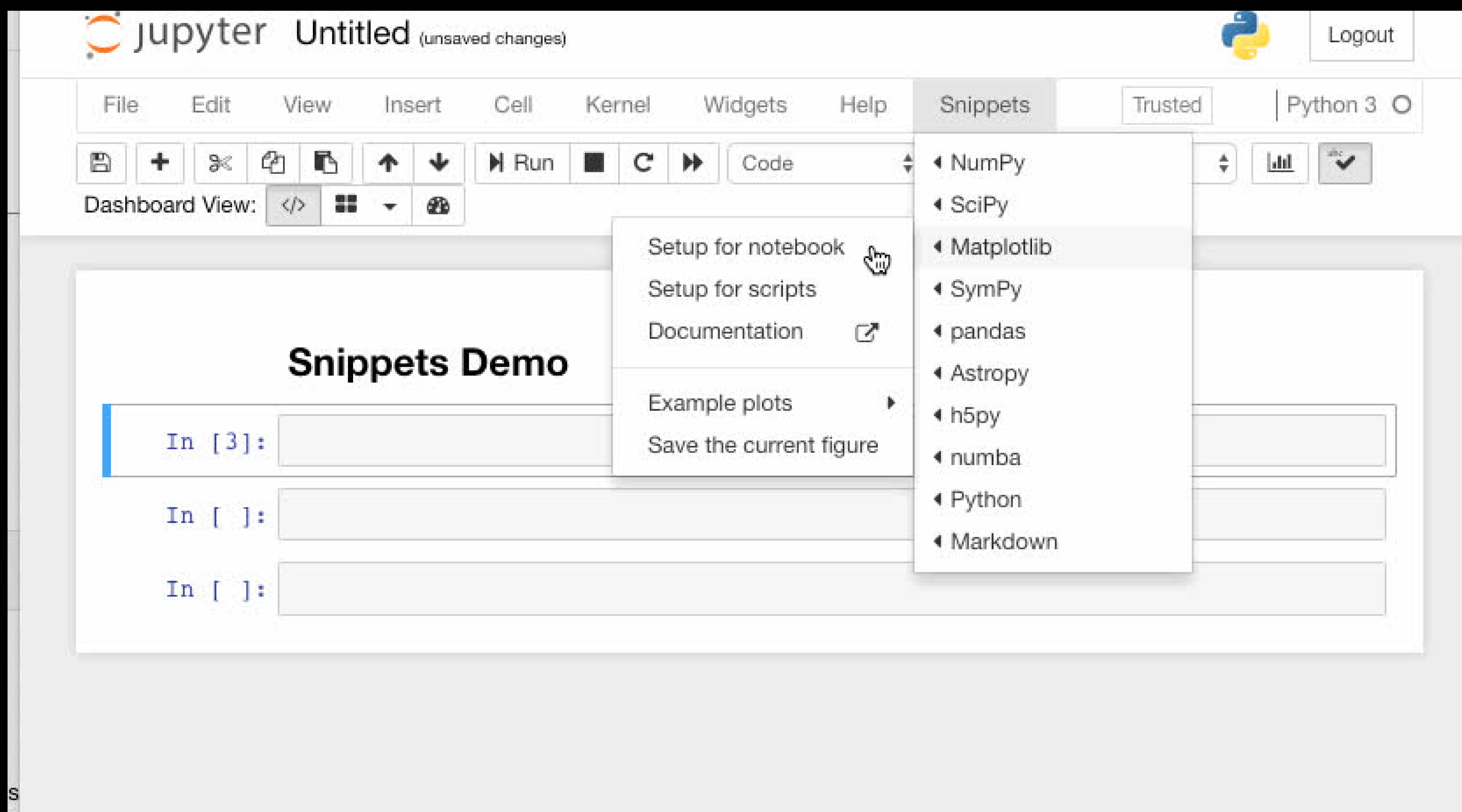
In [13]: bp_data.head()

Out[13]:
```

Presidency	President	Wikipedia Entry	Took office	Left office	Party	Portrait
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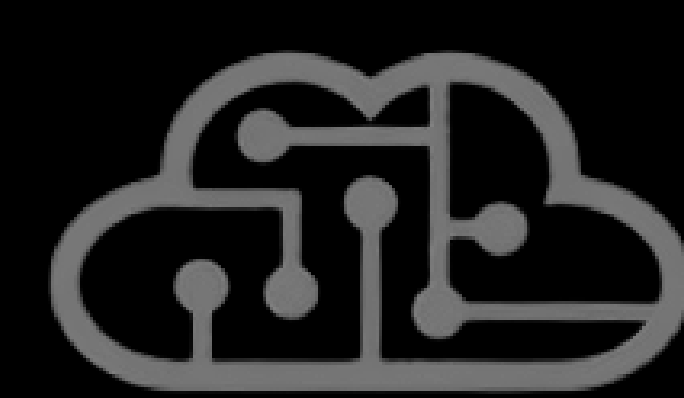
Autopep8

Autopep8 reformats code to fix basic spacing errors that do not follow Pep8 guidelines. I recommend referencing Pep8 documentation for detailed style guidelines. However, this extension does a good job with spacing errors.



Snippets Menu

The Snippets Menu extension adds a menu item to your Jupyter Notebook where you can search for snippets, boilerplate, and examples of code to insert into your notebook.



```
In [2]: import qgrid
qgrid_widget = qgrid.show_grid(df, show_toolbar=True)
qgrid_widget
```

index	A	B	C	D	E
0	2013-01-01	-2.0773	washington	foo	✓
1	2013-01-02	-0.55236	adams	bar	
2	2013-01-03	-1.46247	washington	buzz	
3	2013-01-04	0.85559	madison	bippity	
4	2013-01-05	-1.66466	lincoln	boppity	
5	2013-01-06	0.85659	jefferson	foo	✓
6	2013-01-07	1.23665	hamilton	foo	✓
7	2013-01-08	-0.36515	roosevelt	bar	
8	2013-01-09	0.89955	kennedy	zoo	

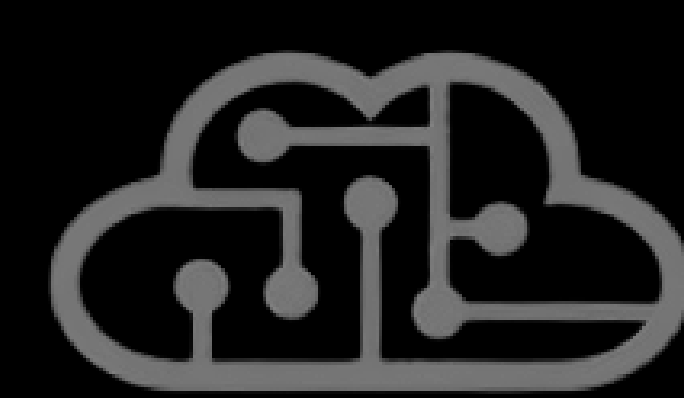
```
In [3]: qgrid_widget.get_changed_df()
```

Out[3]:

	A	B	C	D	E
0	2013-01-01	-2.077295	washington	foo	True
1	2013-01-02	-0.552359	adams	bar	False
2	2013-01-03	-1.462471	washington	buzz	False
3	2013-01-04	0.855593	madison	bippity	False
4	2013-01-05	-1.664660	lincoln	boppity	False
5	2013-01-06	0.856594	jefferson	foo	True
6	2013-01-07	1.236655	hamilton	foo	True
7	2013-01-08	-0.365152	roosevelt	bar	False
8	2013-01-09	0.899548	kennedy	zoo	False

Qgrid

This extension will help us to explore pandas' DataFrame with a few clicks. You can sort and add filters to the columns, scroll across the length of the table, and edit the cells.



```
File Edit View Insert Cell Kernel Help | Python 2 ●

In [1]: import time
import string
import random

def randword(delay=1, length=10):
    time.sleep(delay)
    return ''.join(
        random.choice(string.lowercase)
        for i in range(length)
    )

Last executed 2016-02-17 13:39:49 in 5ms

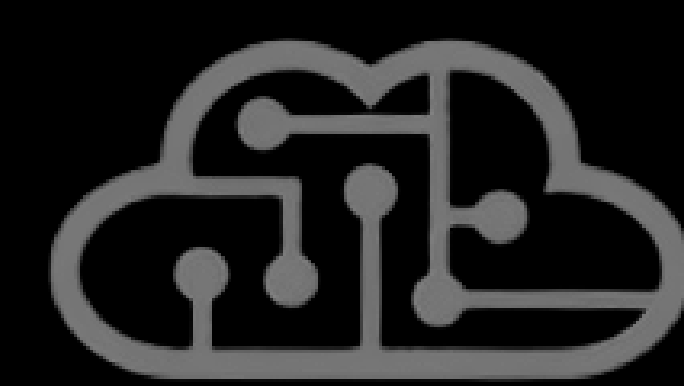
In [2]: randword(0.5)

Last executed 2016-02-17 13:39:49 in 519ms

Out[2]: 'zsygaoxnhe'
```

ExecuteTime

This extension displays when the last execution of a code cell occurred, and how long it took. Every executed code cell is extended with a new area, attached at the bottom of the input area, that displays the time at which the user sent the cell to the kernel for execution.



Variable Inspector

The Variable Inspector extension, which currently supports python and R kernels, enables to collect all defined variables and display them in a floating window. The window not only display the name of variables but also their type, size in memory and content.