

Reading file formats

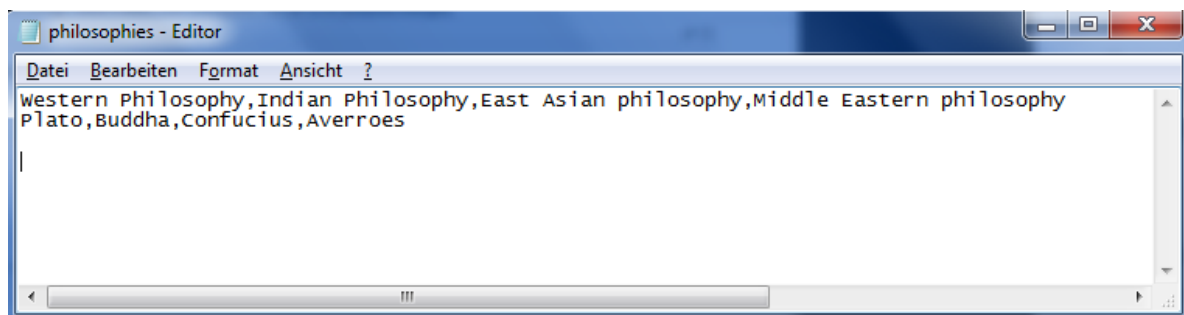
First of all, import NumPy and Pandas as it is the convention:

```
import numpy as np
import pandas as pd

from pandas import Series, DataFrame
```

CSV-File

You have to get or make a CSV-File. Open up any text editor, put your values all separated by commas. Save it as a CSV-File in the directory where your notebooks are saved.



Use the function and run the cell:

```
name_DataFrame = pd.read_csv('nameOfFile.csv')
name_DataFrame
```

```
In [3]: philosophers = pd.read_csv('philosophies.csv')
```

```
In [4]: philosophers
```

```
Out[4]:
```

	Western Philosophy	Indian Philosophy	East Asian philosophy	Middle Eastern philosophy
0	Plato	Buddha	Laozi	Mani
1	Nietzsche	Nagarjuna	Confucius	Avicenna
2	Wittgenstein	Krishnamurti	Zhuangzi	Averroes

JSON

- Here is an example:

```
In [4]: # Example of what a JSON (JavaScript Object Notation) Looks Like:
js = """
{
  "Branch": ["Metaphysics", "Aesthetics", "Ethics", "Logic"],
  "Philosophers": ["Metaphysicians", "Aestheticians", "Ethicists", "Logicians"],
  "Example": ["David Lewis", "Immanuel Kant", "Aristotle", "William of Ockham"],
  "School": ["Analytic", "Continental", "Peripatetic", "Scholasticism"]
}
"""

In [5]: import json

In [6]: data = json.loads(js)

In [7]: data
Out[7]: {'Branch': ['Metaphysics', 'Aesthetics', 'Ethics', 'Logic'],
'Philosophers': ['Metaphysicians', 'Aestheticians', 'Ethicists', 'Logicians'],
'Example': ['David Lewis', 'Immanuel Kant', 'Aristotle', 'William of Ockham'],
'School': ['Analytic', 'Continental', 'Peripatetic', 'Scholasticism']}

In [8]: #Convert back to JSON
json.dumps(data)
Out[8]: '{"Branch": ["Metaphysics", "Aesthetics", "Ethics", "Logic"], "Philosophers": ["Metaphysicians", "Aestheticians", "Ethicists", "Logicians"], "Example": ["David Lewis", "Immanuel Kant", "Aristotle", "William of Ockham"], "School": ["Analytic", "Continental", "Peripatetic", "Scholasticism"]}'
```

- Do not forget to import json module:

```
import json
```

- With the following you can load json data:

```
choose_name = json.loads(name_of_your_json_obj)
```

- With the following you can open JSON data after loading with a DataFrame:

```
choos_another_name = DataFrame(choose_name)
```

```
In [9]: df = DataFrame(data)

In [10]: df
Out[10]:
```

	Branch	Philosophers	Example	School
0	Metaphysics	Metaphysicians	David Lewis	Analytic
1	Aesthetics	Aestheticians	Immanuel Kant	Continental
2	Ethics	Ethicists	Aristotle	Peripatetic
3	Logic	Logicians	William of Ockham	Scholasticism

- To show the DataFrame, write again your chosen name of the variable and run the cell.