# Reading file formats
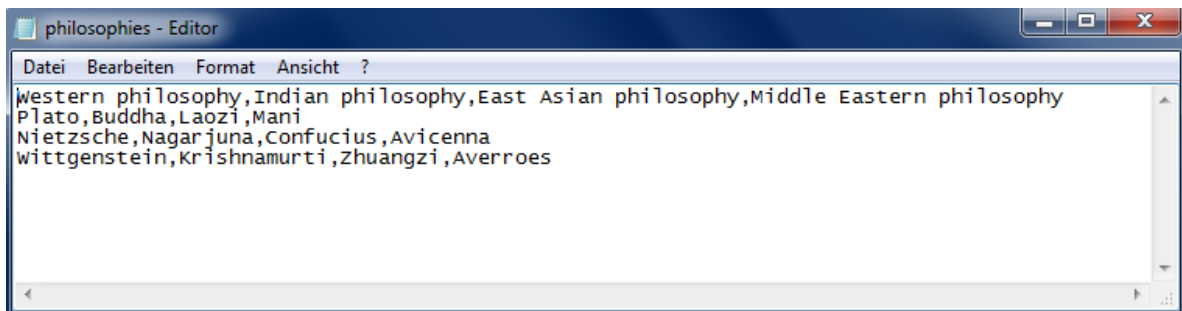
First of all, import NumPy and Pandas as it is the convention:

```
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('nameOfYourFile.csv')
name_DataFrame
```



## 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", "Continenta
         l", "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:

```
choose_another_name = DataFrame(choose_name)
```

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

```
In [10]:  dframe
```

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.