

Applied Data Analytics

Basic Python

Importing Modules

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Contents

- What are libraries?
- Different ways to import libraries or parts of libraries
- Typical errors when importing

Third party libraries

- Python is a general purpose programming language
- The base language you have seen so far is extended by libraries
 - Standard library (e.g. datetime)
 - Third party libraries (e.g. pandas, plotly)
- Libraries need to be imported to use them (and third party libraries need to be installed)

Different ways to import

```
# Import entire library and rename it
import pandas as pd
```

```
#####
# Remaining things are just for
# being able to read others' code
#####
```

```
# Import an entire library
import pandas
```

```
# Import one function / object
from pandas import Series
```

```
# Import everything from a library
from pandas import *
```

1. All that is needed in this course
 - **pandas** (pd)
 - **plotly.express** (px)
 - **plotly.graph_objects** (go)
2. Many functions needed, no convention
3. If one needs one-three specific things
4. Never, ever use

What could go wrong?

```
import paaaaandas as pd
```

```
-----  
ModuleNotFoundError                                Traceback (most recent call last)  
Cell In[1], line 1  
----> 1 import paaaaandas as pd  
  
ModuleNotFoundError: No module named 'paaaaandas'
```

- Meaning: The library you asked for is not found
- Do you have a typo in the library name?
- Is the library installed in your environment?