Data imports

Loading data from files

TUDelft

Data imports

- Data can be stored in different formats

  - txt

  - csv

  - json

  - pkl

  - mat

  - hdf5

General files reading

- <ipynb>

Json (JavaScript Object Notation) files

- Structured data

- Data transmission (web applications)

- Equivalent to python dictionary objects

  - attribute-value pairs

HDF5 (Hierarchical Data Format version 5)

- Large datasets

- Organise data like file directories

Pickle

- Python object serialisation

- Convert (python) objects to byte stream
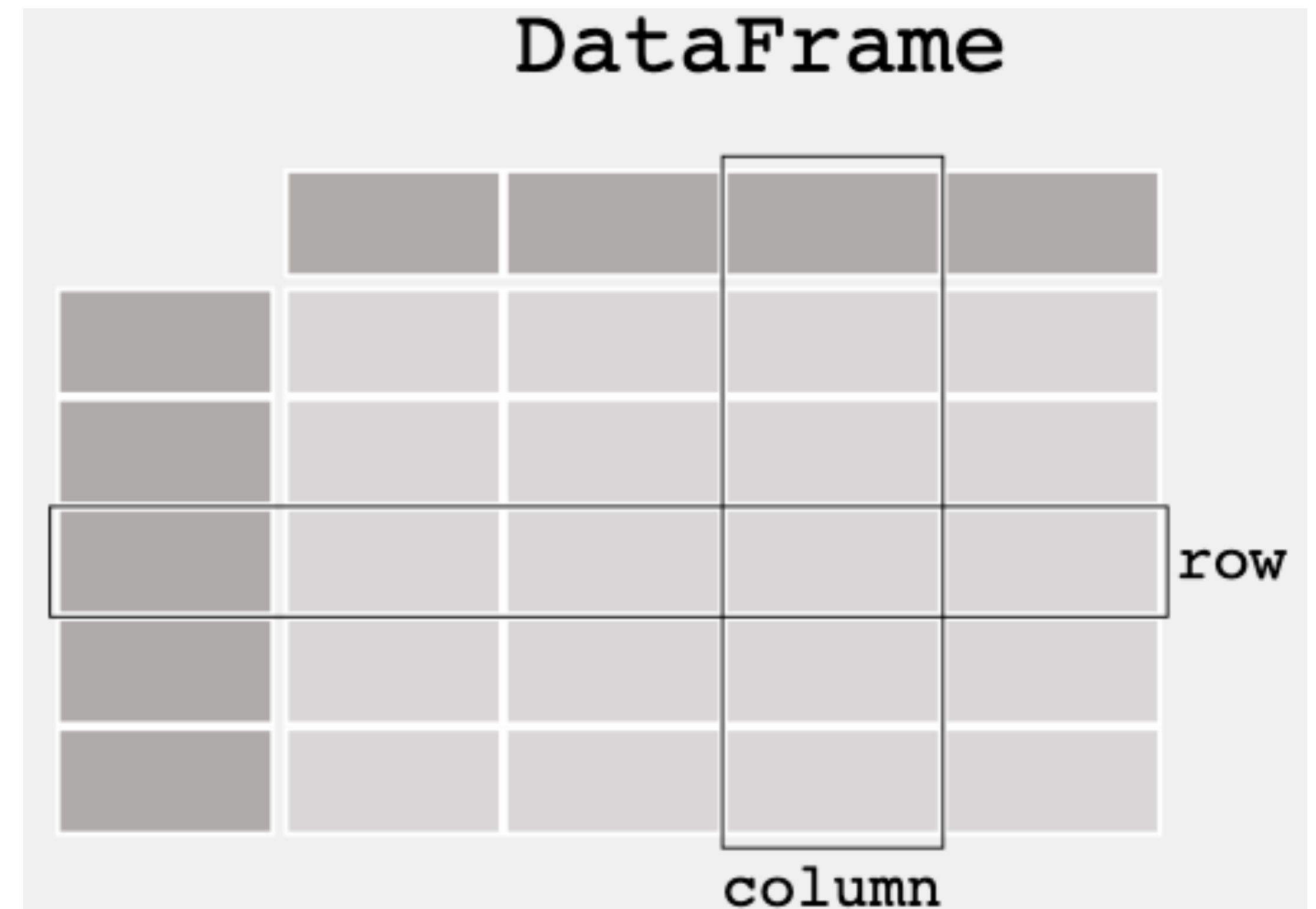
  - Store

  - Recover

Matlab data

- .mat files

Pandas
Tabular data

- Similar softwares

  - Excel

  - R programming language

  - SQL

- Installation

  - conda

  - pip

Pandas
Methods

- Explore

- Clean

- Process

Pandas
Methods

- Visualisation

  - Built-in plot functions based on Matplotlib

  - Common plots: line, bar, boxplot, scatter