

Coding for Economists

Session 1 & 2

Jian Cao

26 January 2025

Outline

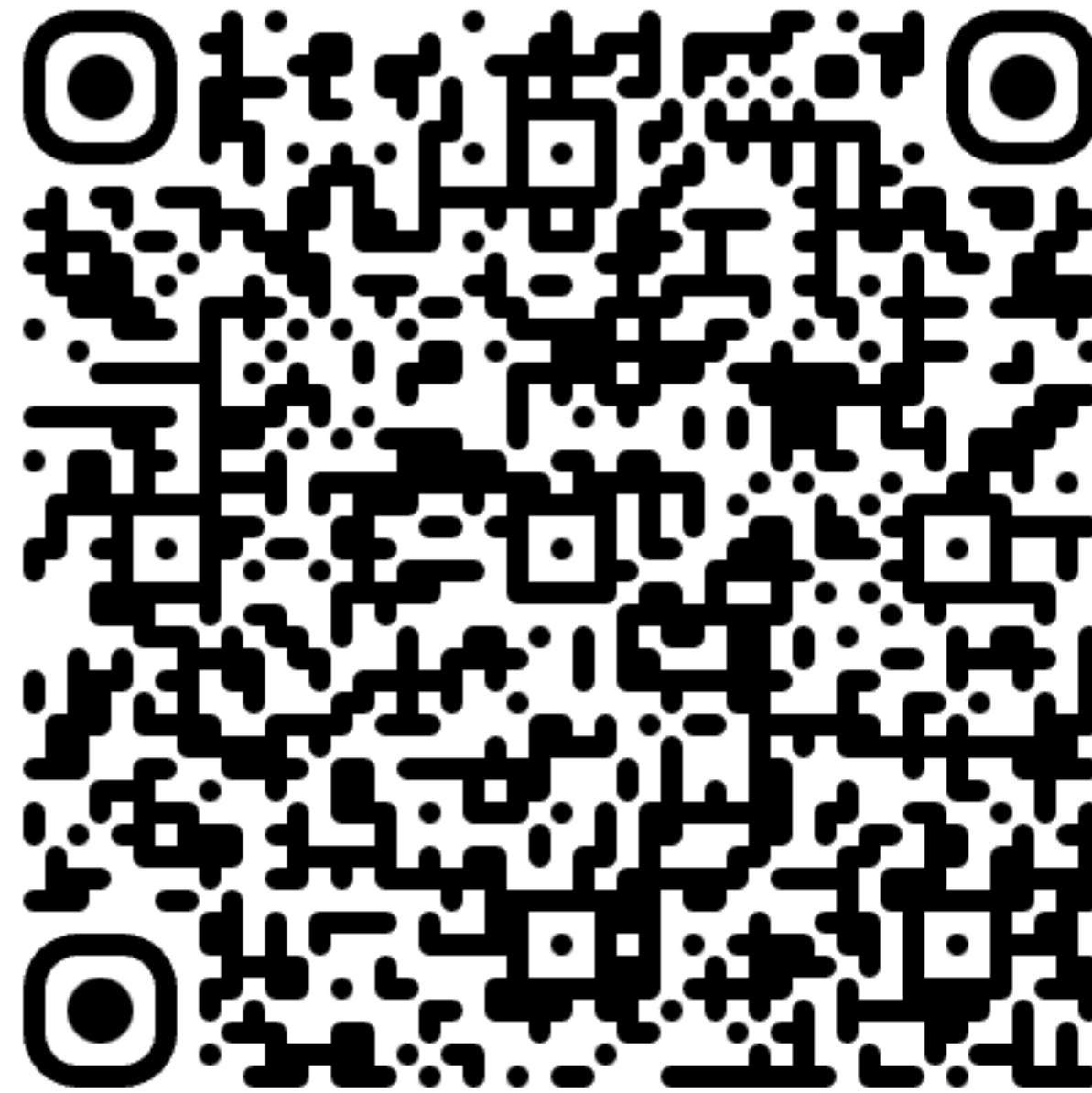
Fundamentals

- Jupyter Notebook
- Python Syntax
- Data Manipulation
- Visualization
- ML Applications
- Version Control

Advanced Topics

- Web Scraping
- Advanced Machine Learning
- Text Analysis
- Large Data Analysis
- High Performance Computing

Module Files



[Google Drive Folder](#)

Why Python

Why Python

- **Machine learning** and **data science** tools

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- Integration of **data sources**

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- **Parallel** and **distributed** computing

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- Advanced **visualization**

Why Python

- **Machine learning** and **data science** tools
- Integration of **data sources**
- **Parallel** and **distributed** computing
- Advanced **visualization**
- Highly **customizable**

Where to Run Python

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- Jupyter Notebook

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- Spyder

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- PyCharm

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Cluster Countries

Install Jupyter Notebook

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- Anaconda

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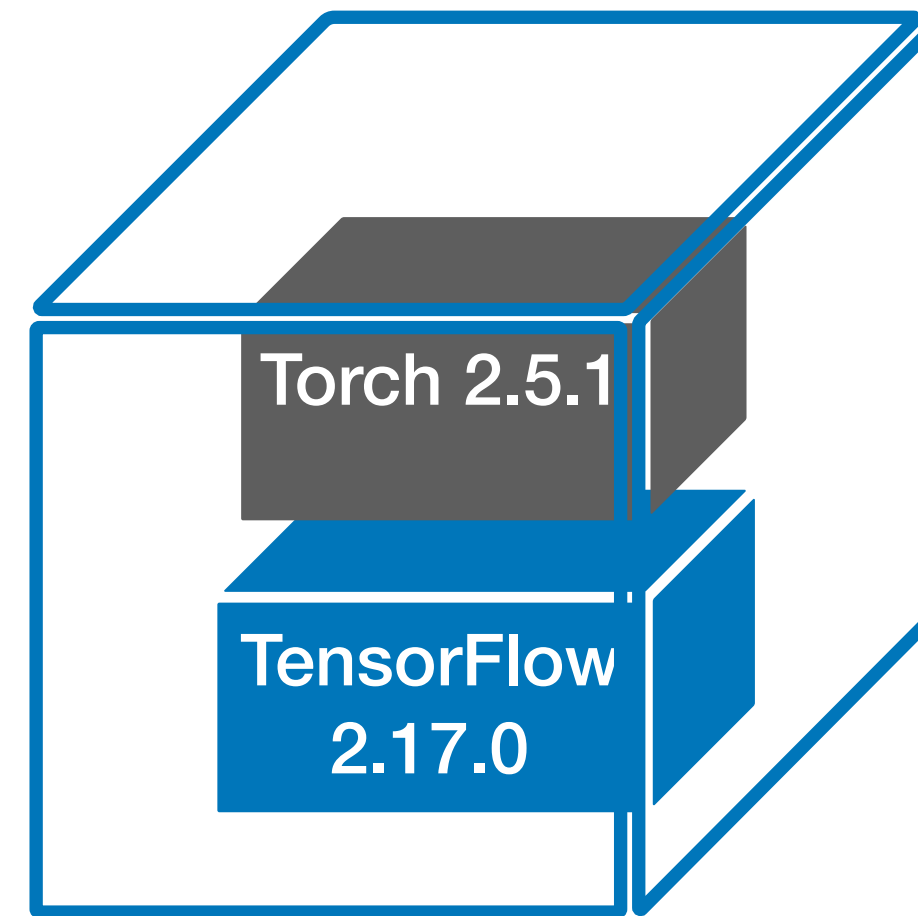
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Install Jupyter Notebook

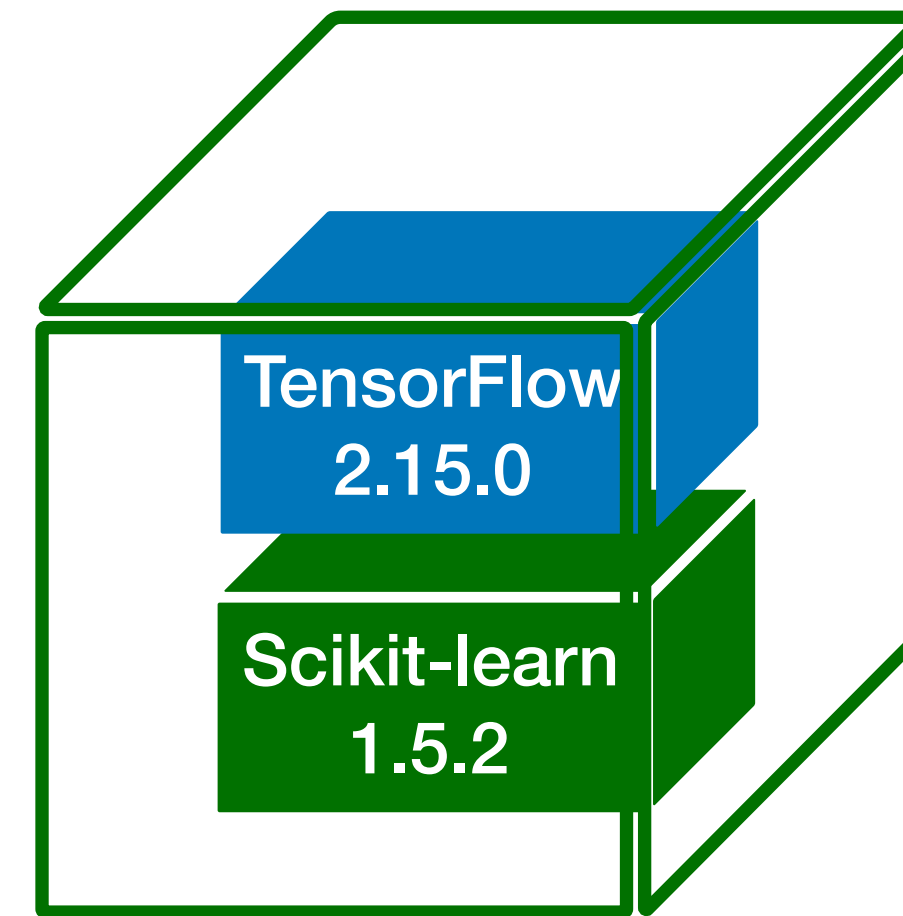
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 3. Open Anaconda.
 4. Create a new environment and activate.
 5. Install Jupyter Notebook in the new environment.

Environments

Environment 1

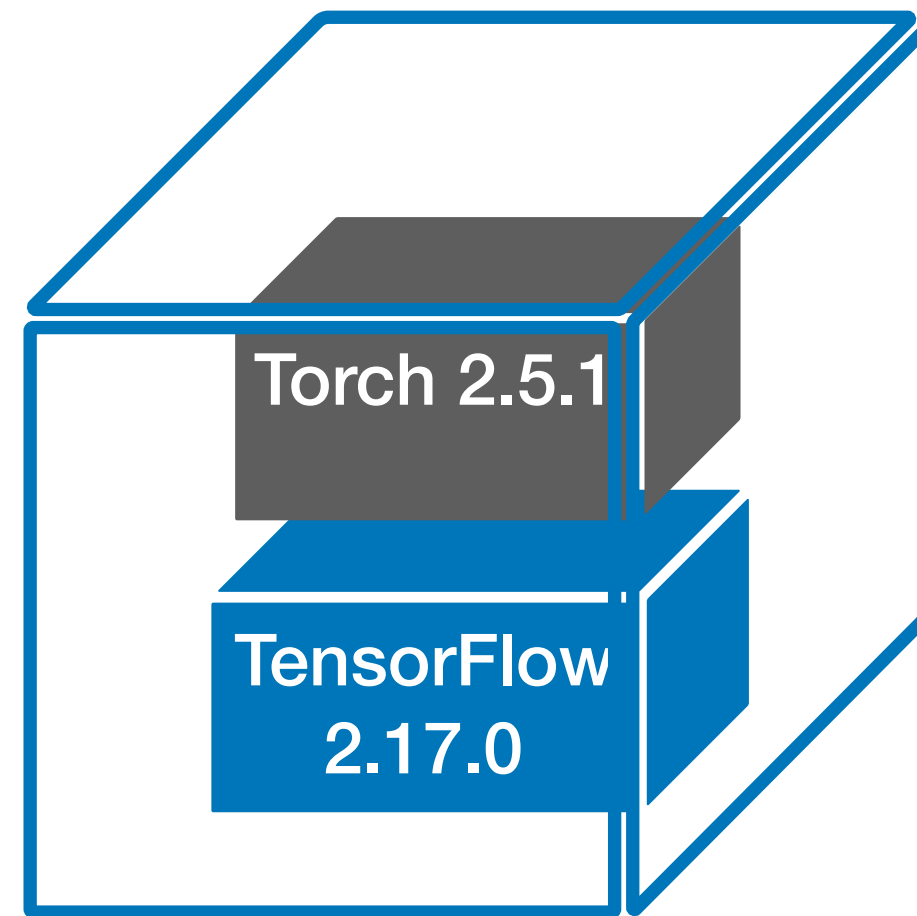


Environment 2

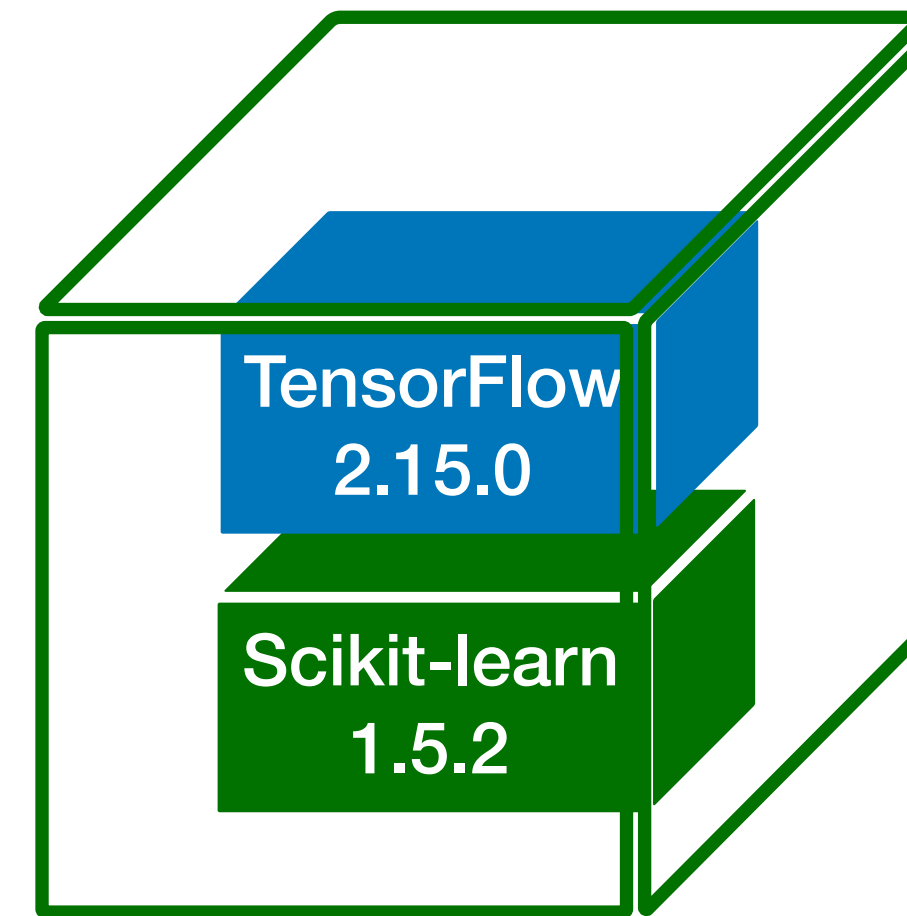


Environments

Environment 1

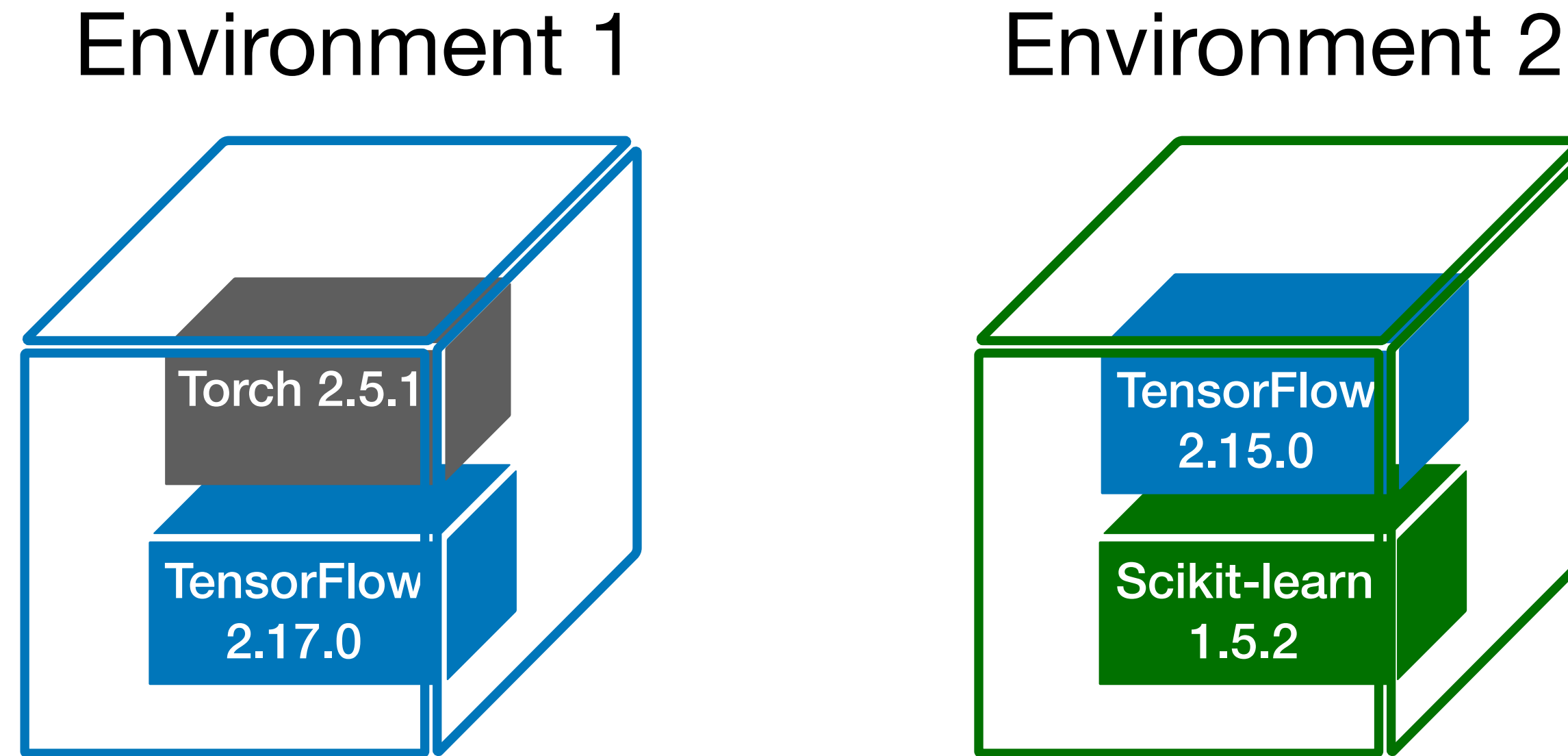


Environment 2



- Software and Python modules installed in different anaconda environments are **independent**.

Environments

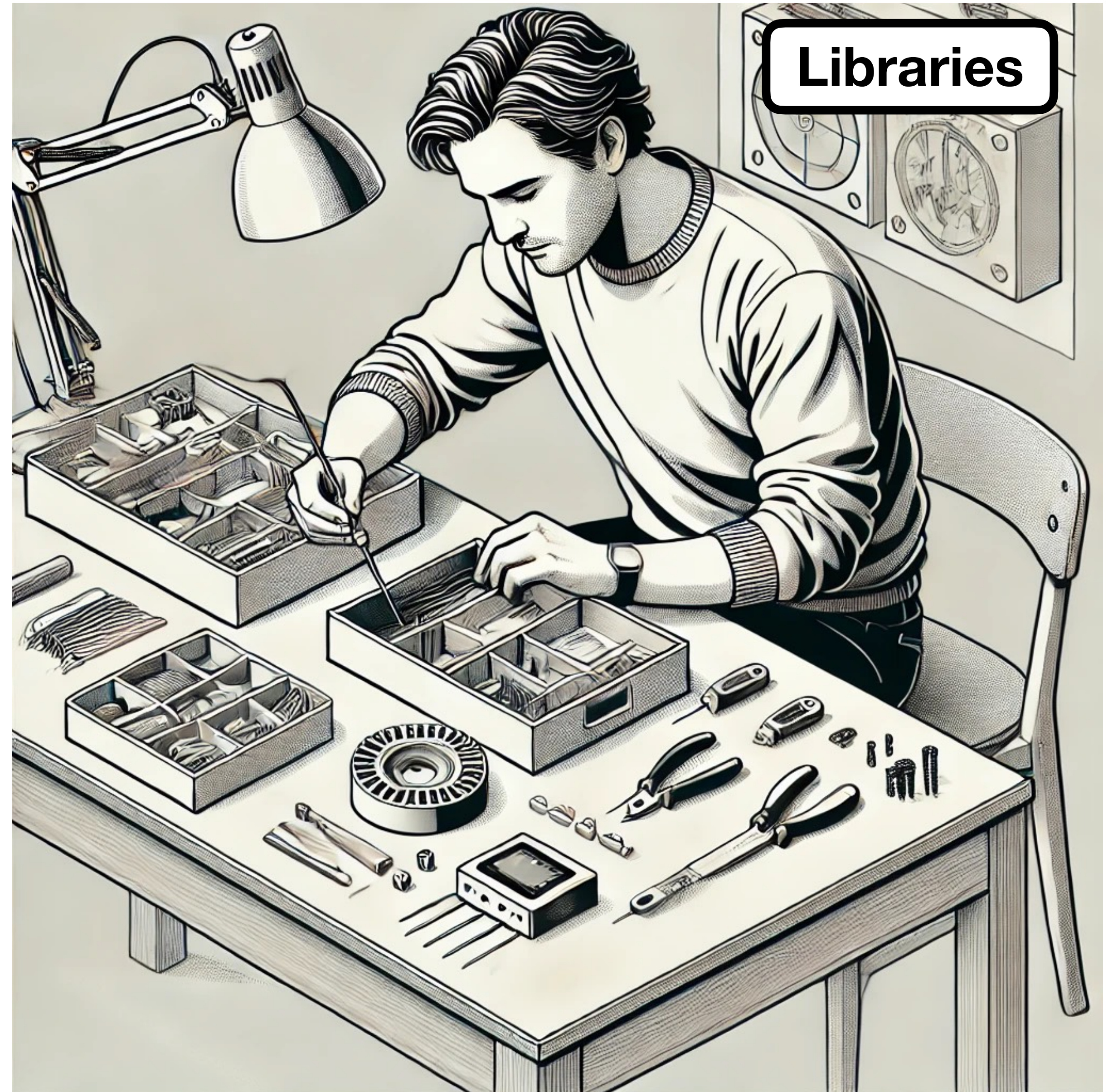


- Software and Python modules installed in different anaconda environments are **independent**.
- Use exclusive environment for each project to minimize conflicts and ensure reproducibility.

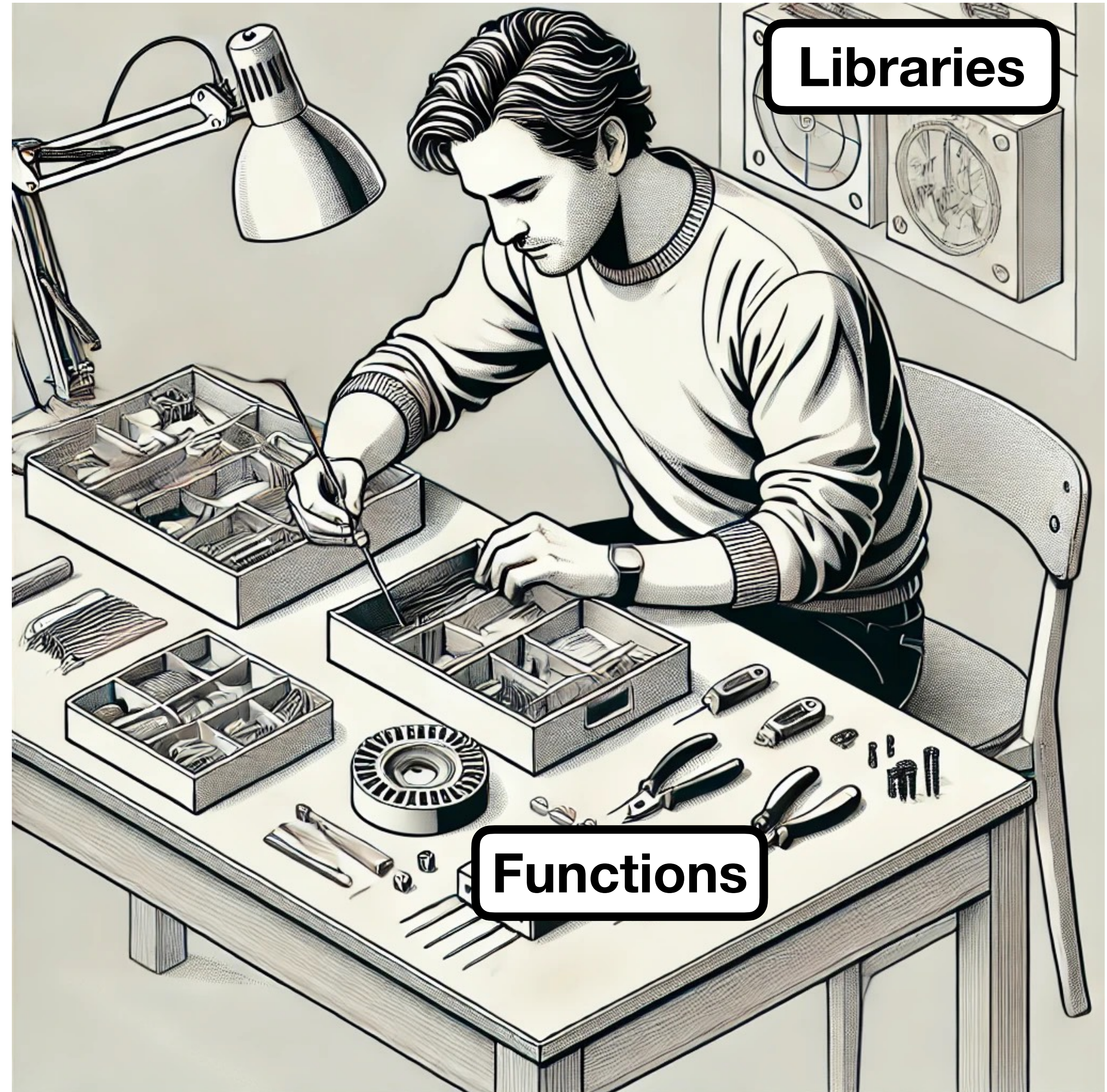
Python Coding



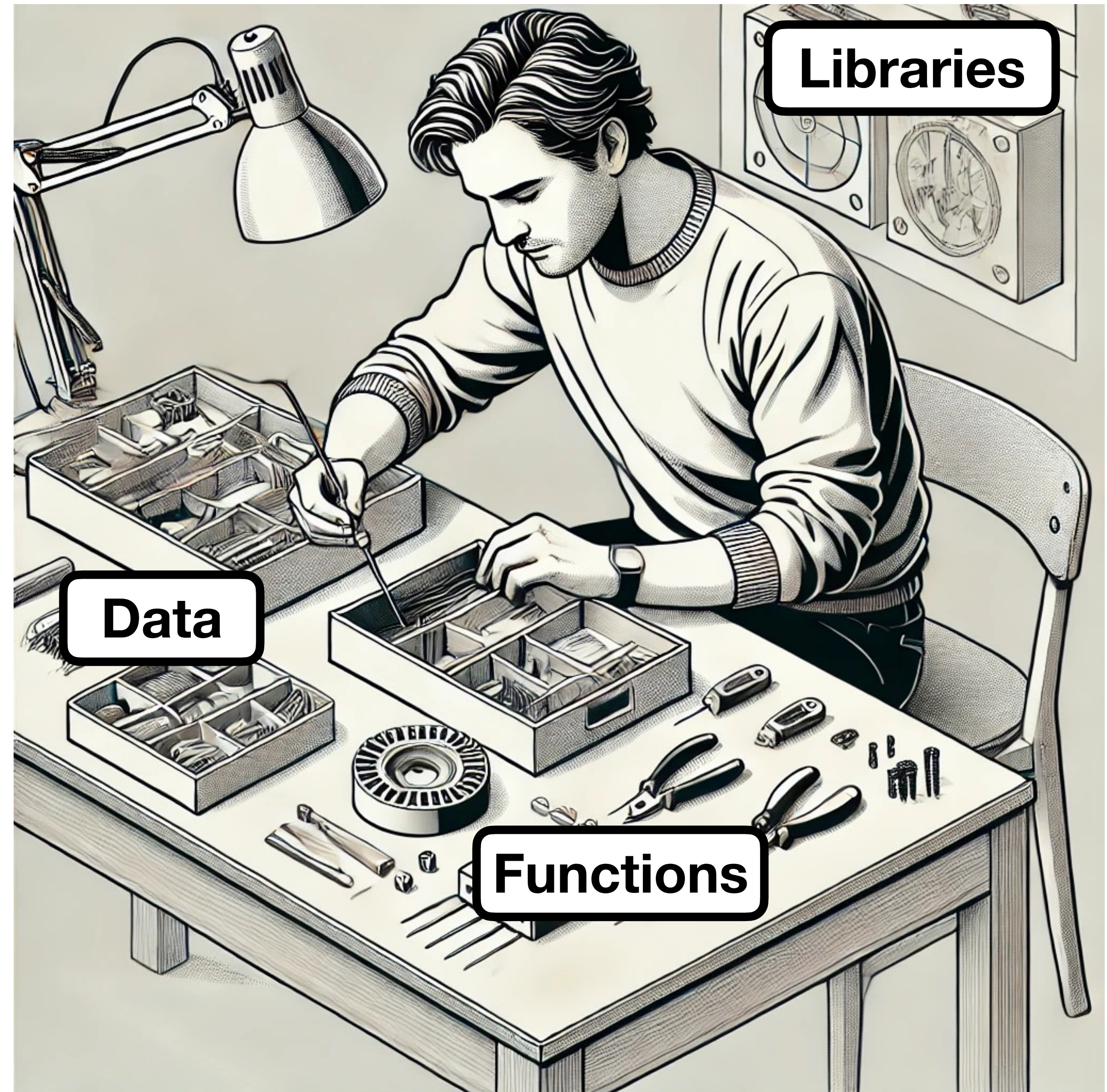
Python Coding



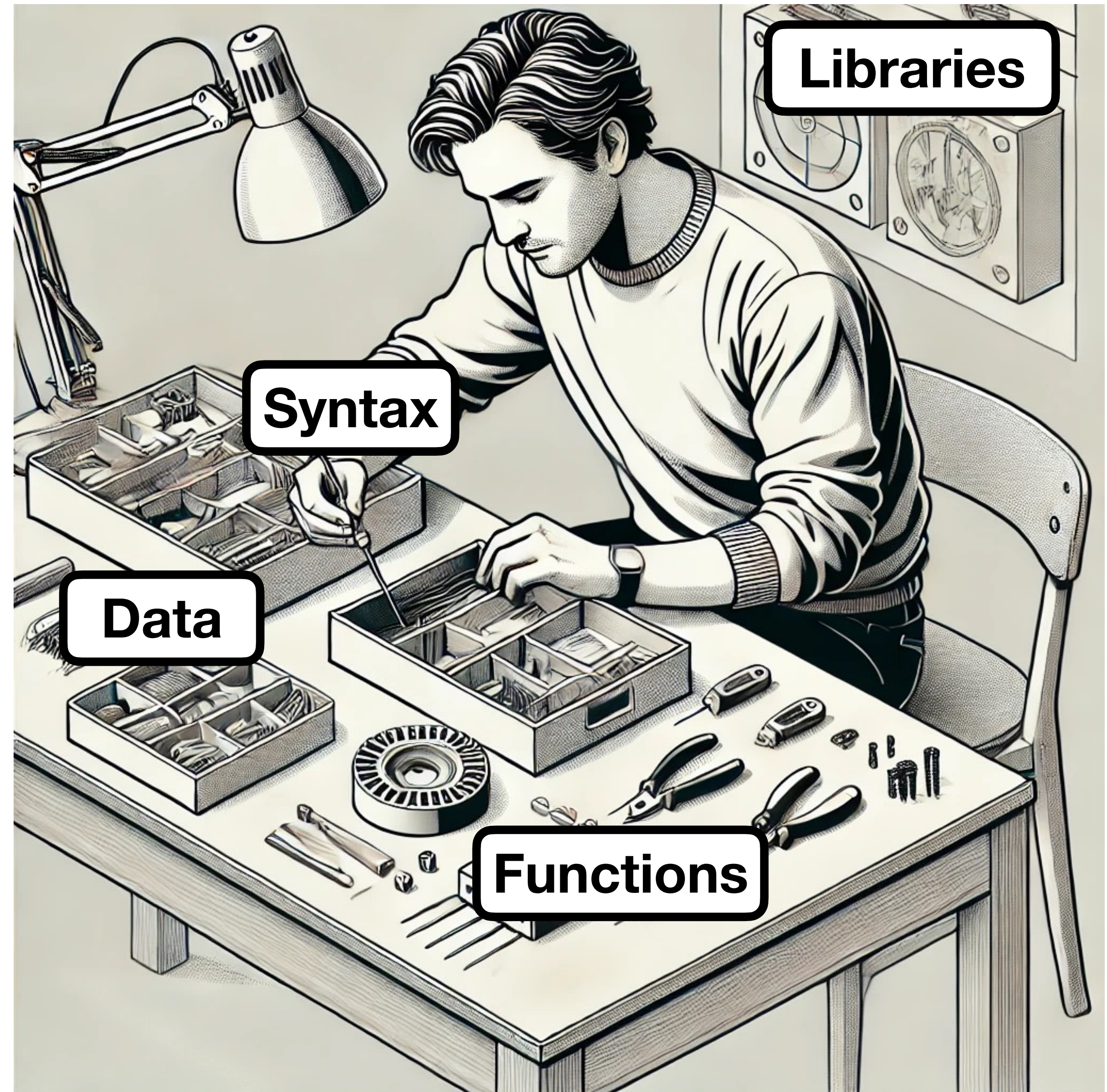
Python Coding



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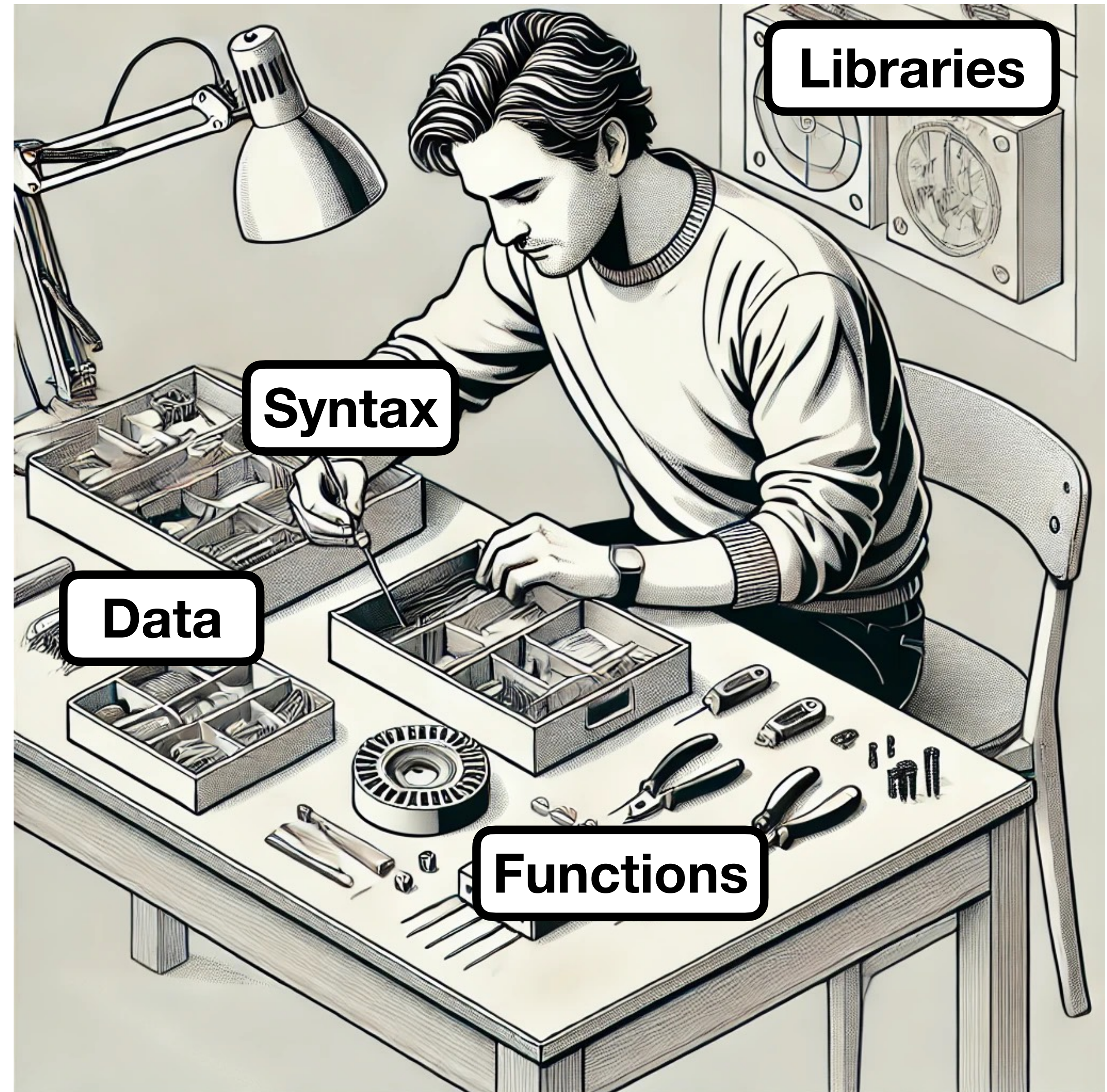


Python Coding



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Cheat Sheets

- Markdown Cheat Sheet: [Link](#)
- Python Cheat Sheet: [Link](#)