Virtual environment

A virtual environment lets you isolate project dependencies, avoiding conflicts and ensuring reproducibility across projects.

1. Create a virtual environment:

```
python -m venv .venv
```

(Assumes you name your virtual environment .venv)

2. Activate your virtual environment:

```
source .venv/bin/active (macOS/linux)
.venv\Scripts\activate.bat (Windows cmd.exe)
```

https://docs.python.org/3.6/library/venv.html

Install dependencies in VS Code

1. For Jupyter Notebook:

```
pip install ipykernel jupyter
```

ipykernel: enables kernel registration

jupyter: allows notebook execution in VS Code

2. For data analysis and visualization:

```
pip install pandas altair vega_datasets
```

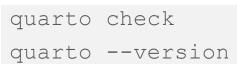
pandas: for data manipulation

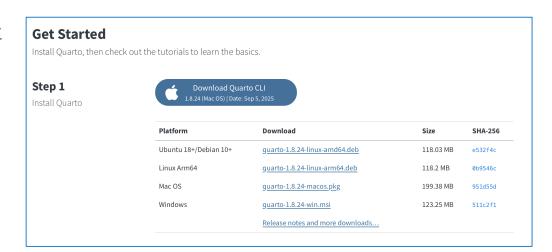
altair: for interactive visualization

vega datasests: for sample datasets used with altair

Install Quarto

- 1. Visit https://quarto.org/docs/get-started
- 2. Select your operating system (Windows, macOS, or Linux)
- 3. Download the installer
- 4. Follow the installation wizard instructions
- 5. Verify installation:





Activate Quarto Extension in VS Code

- 1. Open VS Code
- 2. Go to the Extensions tab (企業X or Ctrl+Shift+X)
- 3. Search for: Quarto
- 4. Click Install on the "Quarto" extension by Quarto Dev Team
- 5. Restart VS Code if required

