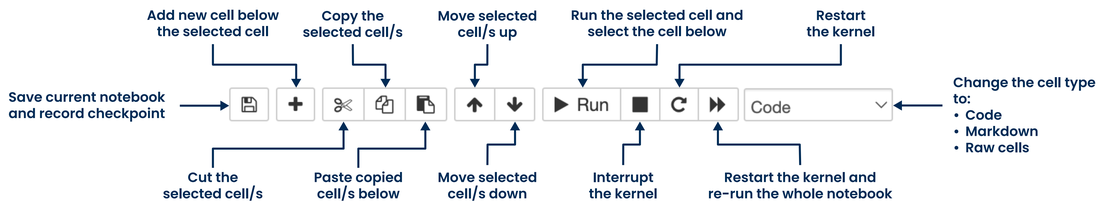
Reference card

Jupyter notebooks

Jupyter Notebook

Jupyter Notebook is an **open-source web application** that enables us to **create** and **organise** documents that contain a combination of text, code, and visual elements. These notebooks are often employed for **data analysis**, **scientific research**, and **interactive coding projects**.

Toolbar shortcuts



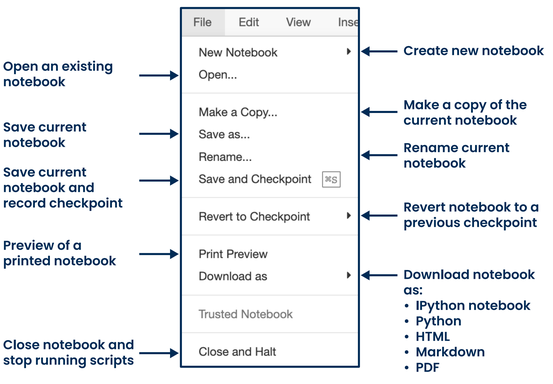
Keyboard shortcuts

Shortcut	Description
Enter	Enter edit mode
Command + s	Save and checkpoint
Command + a	Insert cell above
Command + b	Insert cell below
Shift + Enter	Run cell
Shift + m	Merge cells
Command +]; Command + [	Indent; undo indent
Ctrl + Enter	Run cell
Option + Return	Run cell, insert cell below
Escape + d + d	Delete selected cell
Escape + y	Change cell to code
Escape + m	Change cell to markdown
Escape + r	Change cell to raw
Escape + 1 or 2 or 3	Change cell to Heading 1, 2 or 3
Escape + b	Create cell below
Escape + a	Insert cell above

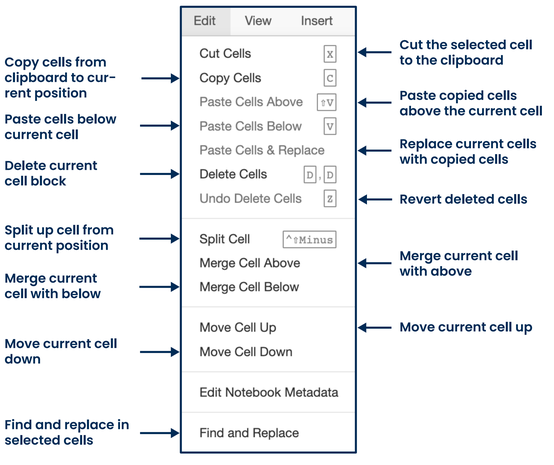
Commonly used terms

Cell	A **multi-line text input field** that allows code to be separated into sections that can be executed independent of one another.
Kernel	**Separate processes started by the server** that run our code in different programming languages and/or environments.
Code cell	**Used for input commands and scripts**. When executed, the notebook processes the code and displays the output.
Markdown cell	**Used for documentation**. We can write text, add headers, and format the content to explain the code.
Raw cell/Raw NBConvert	**Unprocessed content**. It's a space to input data or notes without the notebook interpreting or executing it.
Checkpoint	Checkpoint files are **temporary files that Jupyter Notebook generates automatically while we are working on a notebook**. By default, Jupyter will autosave the notebook every 120 seconds to this checkpoint file without altering the primary notebook file. When we "**Save and Checkpoint**", both the notebook and checkpoint files are updated. Hence, the checkpoint **enables us to recover unsaved work** in the event of an unexpected issue.

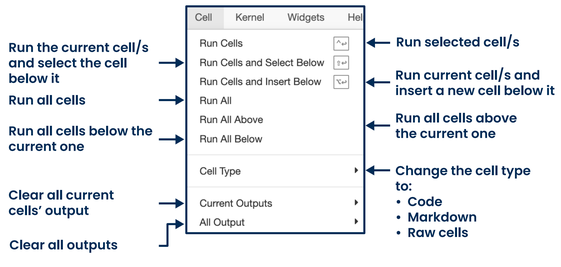
Saving and loading a notebook



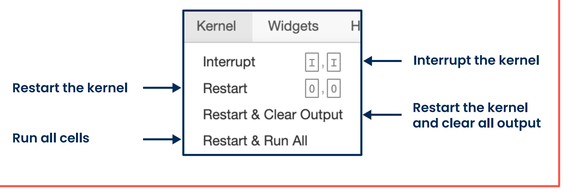
Edit cells



Execute cells



Kernel cells



Cell statuses

The [ ]: symbol to the left of each code cell describes the state of the cell:

[ ]: means that the cell has not been run yet.

[*]: means that the cell is currently running.

[1]: means that the cell has finished running and was the first cell to run.

Insert cells