

1.2 Jupyter – Jupyter basics

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1 Jupyter basics

This notebook is based of [Lectures on scientific computing with Python](#) by J.R. Johansson.

1.1 Notebook editor

Jupyter Notebook has a modal user interface. This means that editor behaves differently depending on which mode the notebook is in. There are two modes: **edit mode** and **command mode**.

1.1.1 Edit mode

Edit mode is indicated by a blue cell border and a prompt showing in the editor area:

When a cell is in edit mode, you can type into the cell, like a normal text editor.

Enter edit mode by tapping inside cell’s editor area, or pressing **Enter** on your hardware keyboard.

1.1.2 Command mode

Command mode is indicated by a grey cell border:

When you are in command mode, you are able to edit the notebook as a whole, but not type into individual cells. Your on-screen keyboard will be hidden in command mode, but if you have a hardware keyboard connected, it will be mapped to a set of shortcuts that let you perform notebook and cell actions efficiently. For example, if you are in command mode and you press **c**, you will copy the current cell — no modifier is needed.

Enter command mode by tapping *outside* cell’s editor area, or by pressing **Esc** or **Control** on your hardware keyboard.

1.2 Keyboard navigation

You can use Jupyter keyboard shortcuts. The modal user interface of the Jupyter Notebook has been optimized for efficient keyboard usage. This is made possible by having two different sets of keyboard shortcuts: one set that is active in edit mode and another in command mode. Please refers to **Help->Keyboard Shortcuts** for specific platform shortcuts

In edit mode, most of the keyboard is dedicated to typing into the cell’s editor. Thus, in edit mode there are relatively few shortcuts. In command mode, the entire keyboard is available for shortcuts, so there are many more. Most important ones are: 1. Switch command and edit mods: **Enter** for edit mode, and **Esc** or **Control** for command mode. 2. Basic navigation: **↑/k**, **↓/j** 3. Run or render currently selected cell: **Shift+Enter** or **Control+Enter** 4. Saving the notebook: **s**

5. Change Cell types: **y** to make it a **code** cell, **m** for **markdown** and **r** for **raw** 6. Inserting new cells: **a** to **insert above**, **b** to **insert below** 7. Manipulating cells using pasteboard: **x** for **cut**, **c** for **copy**, **v** for **paste**, **d** for **delete** and **z** for **undo delete** 8. Kernel operations: **i** to **interrupt** and **0** to **restart**