The Jupyter Notebook Interface

Contents

Objectives

This unit will give you an introduction about the Jupyter Notebook interface.

Jupyter Notebook Interface Walkthrough

The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations, and narrative text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more.

Jupyter notebook helps us in the following ways:

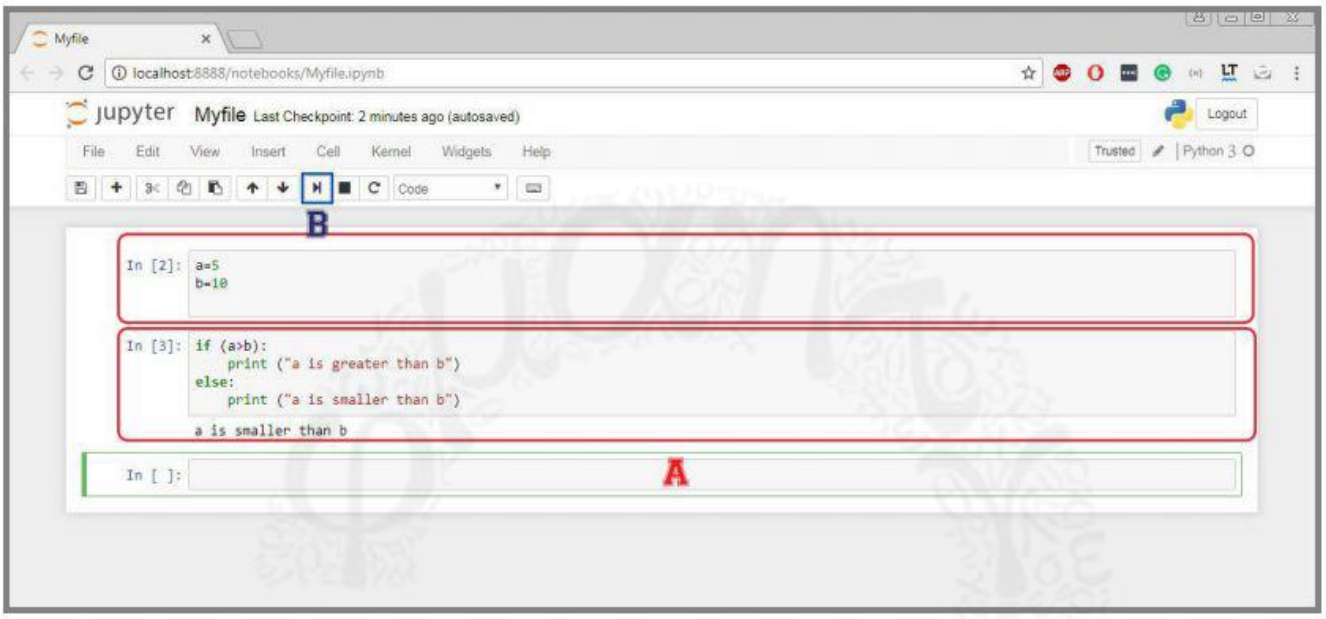
1. **Language of Choice:** The Notebook has support for over 40 programming languages, including Python, R, Julia, and Scala.

2. **Share Notebooks:** Notebooks can be shared with others using email, Dropbox, GitHub and the Jupyter Notebook Viewer.

3. **Interactive Output:** Your code can produce rich, interactive output: HTML, images, videos, LaTeX, and custom MIME types

Source: http://jupyter.org/

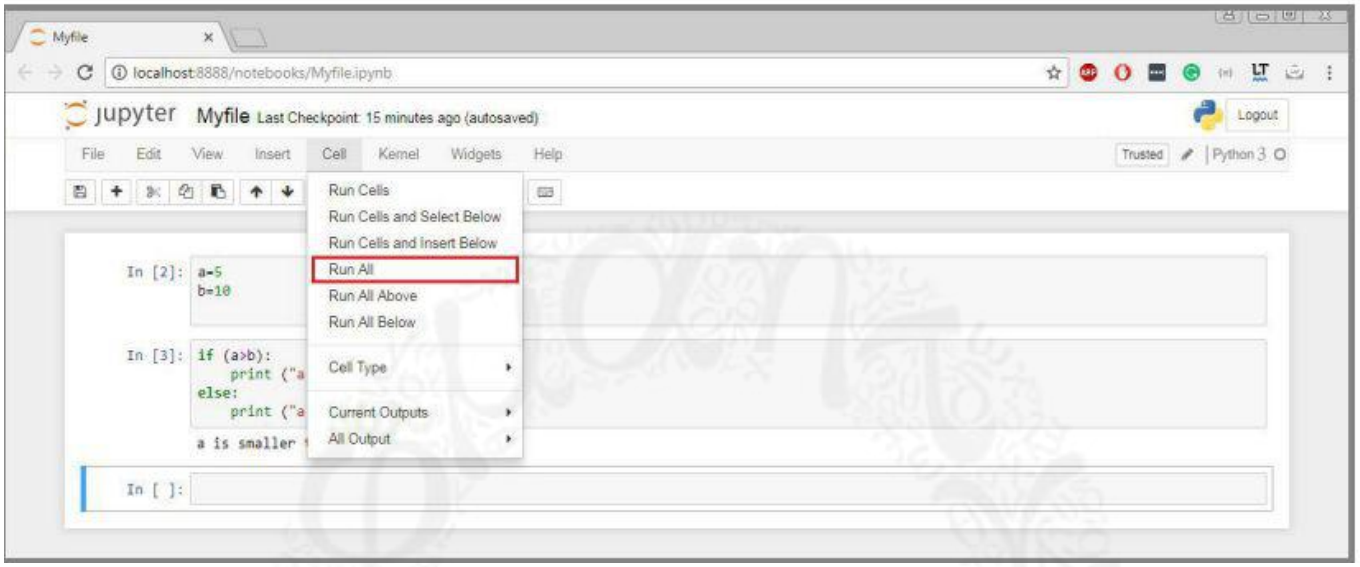
Screenshot 1



A: The areas highlighted as 'A' are called 'cells'. One can write the required code in each cell and execute them.

B: This is the 'run' button. Once you write a code in a particular cell, you may run them by pressing the run button. If at all there are errors, the iPython console will give errors and you may rectify them according to the error message.

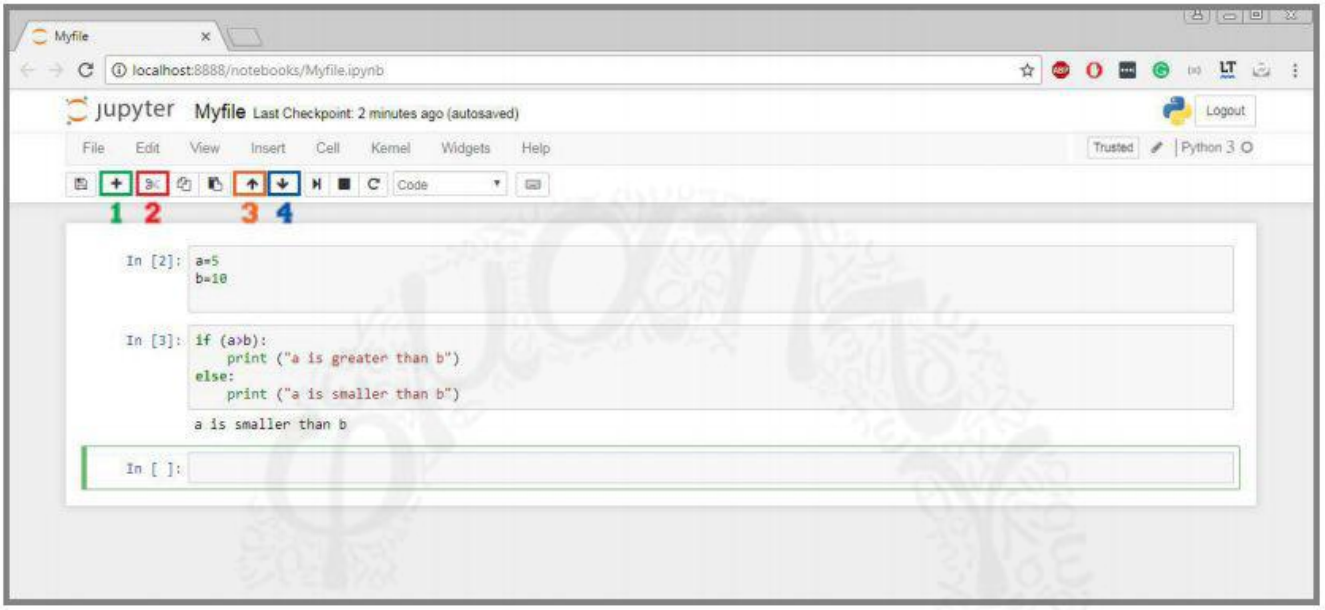
Screenshot 2



The 'Run All' option runs or executes all the cells together. Sometimes, executing a single cell may not give the required output. If you execute them as a single unit. At such instances, you may have to use the 'Run All' option.

Also, as you start your journey in python, the size of code that you will write will increase. In such instances when there are many cells in which the code is written, you can use the 'Run All' option for executing the entire program to get the required output.

Screenshot 3



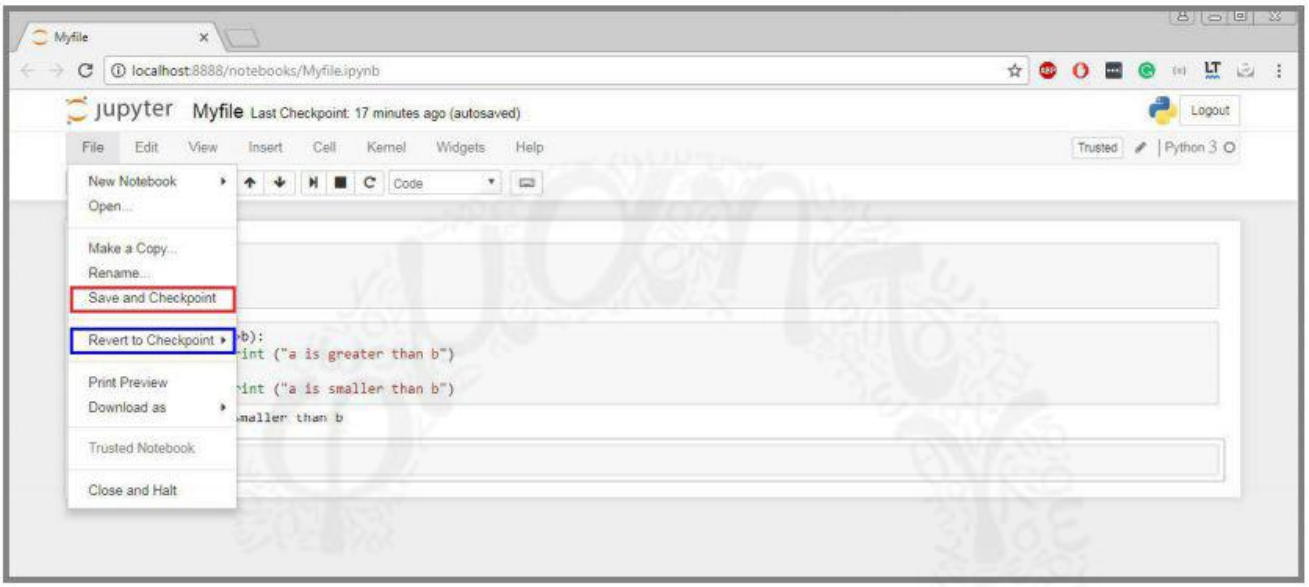
1: It is used to add a cell.

2: It is used to delete a particular cell.

3: When the piece of code you have written is long and is spread over different cells, it helps you navigate in the upward direction.

4: When the piece of code you have written is long and is spread over different cells, it helps you navigate in the downward direction

Screenshot 4



Save and Checkpoint : Whatever code you write in the iPython notebook is auto saved, but if you want to lock a particular piece of code and then carry on with editing your code, you can use the 'Save and Checkpoint' Option.

Revert to Checkpoint: Once you save a particular checkpoint, and you want to return to that point and start editing again from that point, then you can use the 'Revert to Checkpoint'. It will start from where it was previously saved (Save and checkpoint).

As you start using the iPython notebook, you will come across more things by yourself, however the above information is enough to get you started.

This is where the 'Python Environment' section ends. Hope you have installed the python environment. Stay Tuned and Happy Learning!