

Skills Network

Lab: Working with files in Jupyter Notebooks

Estimated time needed: 15 minutes

Objectives

After completing this lab, you will be able to:

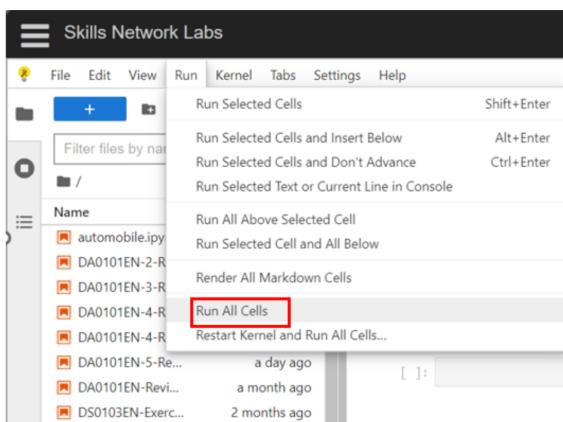
- Explore different Run Options
- Rename your notebook
- Shutdown your notebook
- Save and download the notebook
- Upload the downloaded notebook
- Work with multiple notebooks

Exercise 1

Explore different Run Options

You can explore the various run options under the **Run** menu such as **Run Selected Cells**, **Run All cells**, **Run Selected Cells and Insert Below** and many more.

*One such option to execute all cells by choosing **Run All cells** option from the Run menu is illustrated below:*



• Enter the following expression `11+4` in the cell below and **execute** it by using the **Run Selected Cells** option.

```
[1]: ## Click here and use Run Selected Cells to execute it.
11+4
```

```
[1]: 15
```

► Click here for the solution

You can insert a cell automatically after the execution of the code using the **Run Selected Cells and Insert Below**

• Enter the following expression `150*50` in the cell below and **execute** it by using the **Run Selected Cells and Insert Below**

```
[2]: ## Click here and use Run Selected Cells to execute it.
150*50
```

```
[2]: 7500
```

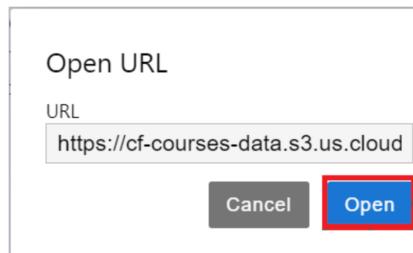
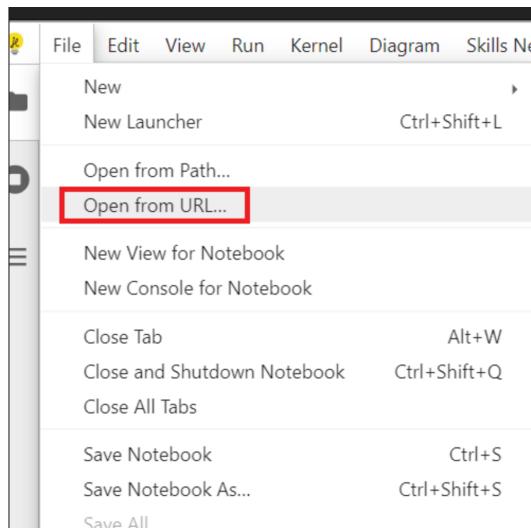
► Click here for the solution

Exercise 2

Rename your notebook

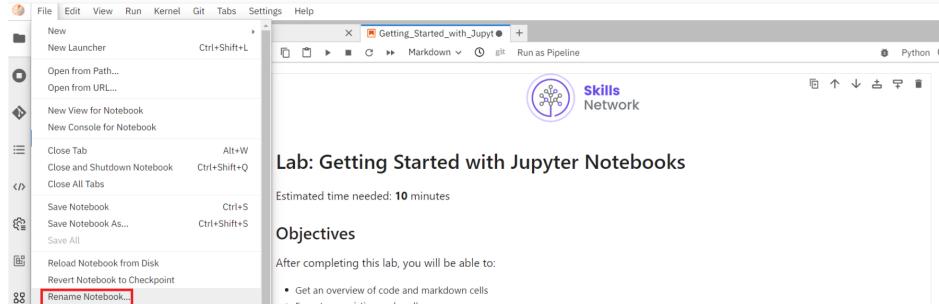
You can now rename your notebook to your preferred name as follows:

- Open the **Lab: Getting Started with Jupyter Notebooks** in Skills Network Labs by following these steps:
 - Click **File** menu, and select **Open From URL** option.
 - Enter the notebook URL https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DS0105EN-SkillsNetwork/labs/Labs_V4/Getting_Started_with_JupyterNotebook.ipynb in the prompt window, and then click **Open** on the Open URL window.

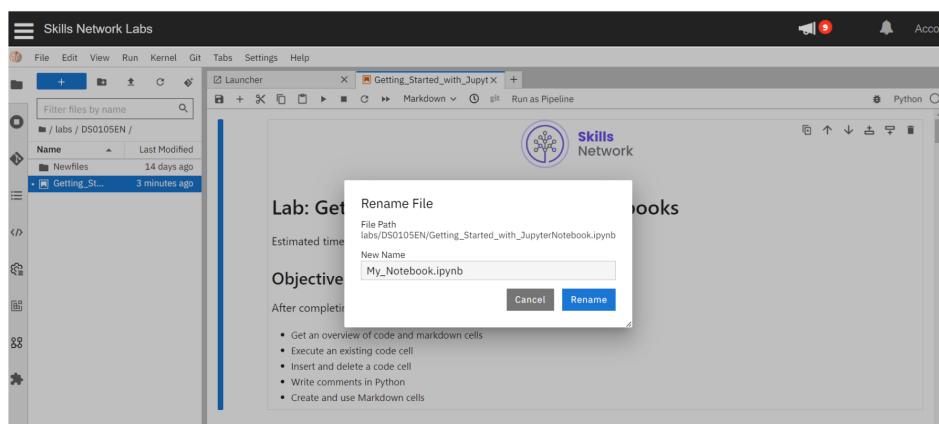


- The notebook will be loaded and opened in your lab environment.
2. Create a new code cell before **Exercise 3** and add `2+9`. Execute the code cell and save the notebook using **Save Notebook** or **Save Notebook as** option from the **File** menu.

3. Click the **File** menu and select **Rename Notebook** to rename your notebook.



- Rename the file as **My_Notebook.ipynb**.



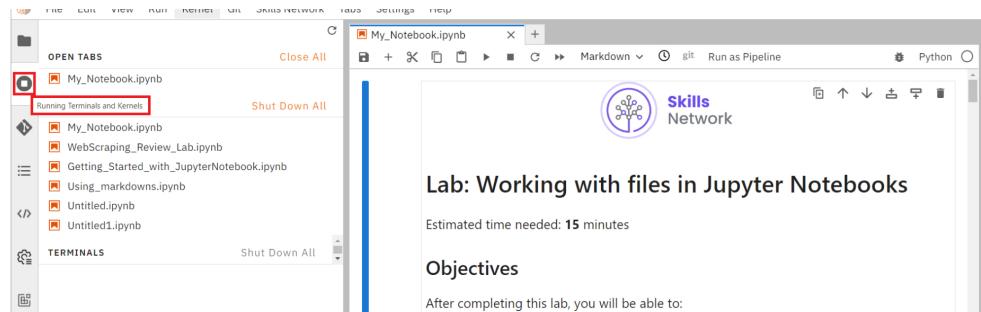
Exercise 3

Shutdown your notebook

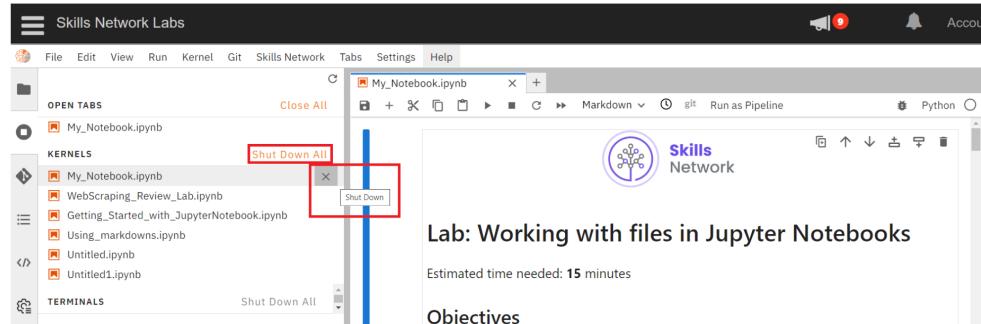
You can shut down the notebook session as follows:

- You can view the existing running sessions by clicking the **Running Terminals and Kernels** in the left navigation pane.





2. Click the **Shut Down All** option to shut down all notebook sessions.
3. To shutdown the individual notebook, click the **Shut Down** option below the cross button (X) next to the notebook. This helps free up the memory that the notebook is using.



Exercise 4

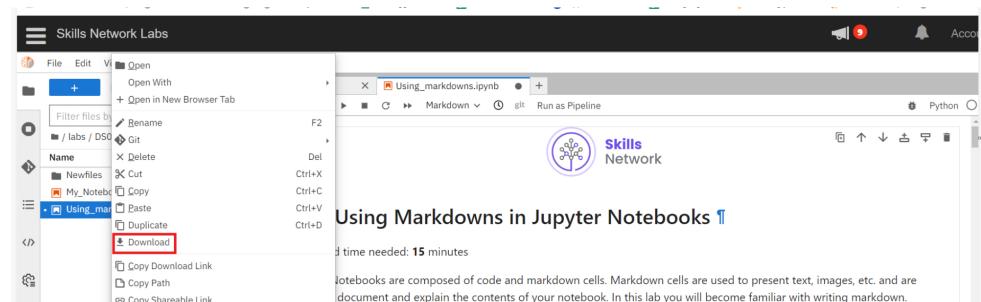
Save and Download the notebook

Open the **Lab:Using Markdowns in Jupyter Notebooks** in Skills Network Labs by following these steps:

- Click the **File** menu, and select **Open From URL** option.
- Enter the notebook URL https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDriverSkillsNetwork-DS0105EN-SkillsNetwork/labs/Labs_V4/Using_markdowns.ipynb in the prompt window, and then click the **Open** button. Although your notebooks and data are preserved in your account after logging out, sometimes you may want to download your notebook to your computer.
- To save, click the **Save Notebook** or **Save Notebook as** button from the **File** menu.

Once you complete the lab, you can **download** the notebook as follows:

- Select the notebook displayed in the left **Navigation pane**.
- Right-click and select **Download** on he menu.



- Your notebook is downloaded to your local machine.

Exercise 5

Upload the downloaded notebook

In the previous exercise, we learned how to save and download a notebook. Now we will learn to upload a notebook to Skills Network Labs.

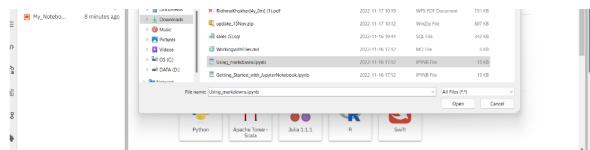
To upload the notebook we have two options:

1. **Upload files option.**
2. **Drag and drop option.**

1. Upload files option

- Click **Upload Files** to upload the notebook, which you had downloaded in **Exercise 2** to Skills Network.
- Browse for the notebook in your local machine and select it.

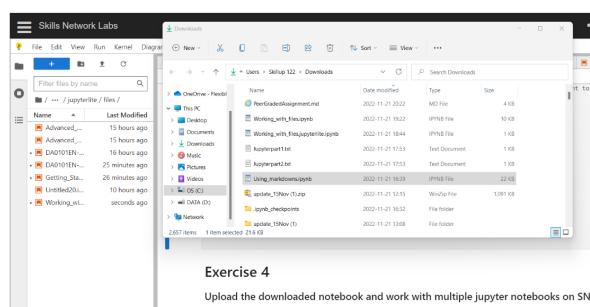




- Once the upload is complete, the notebook will appear in the Skills Network Labs left navigation pane.
- Double-click on the notebook to open and view its contents.

2. Drag and drop option

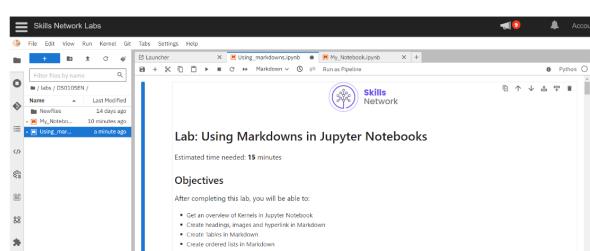
- Go to file manager of your local system to view the downloaded file.
- Select the notebook and drag the file into the **file explorer** of Skills Network Labs.



Exercise 4

Upload the downloaded notebook and work with multiple jupyter notebooks on SN lab

- The notebook now appears in the left panel of the Skills Network Labs environment.
- Double click on the notebook to open and view its contents.

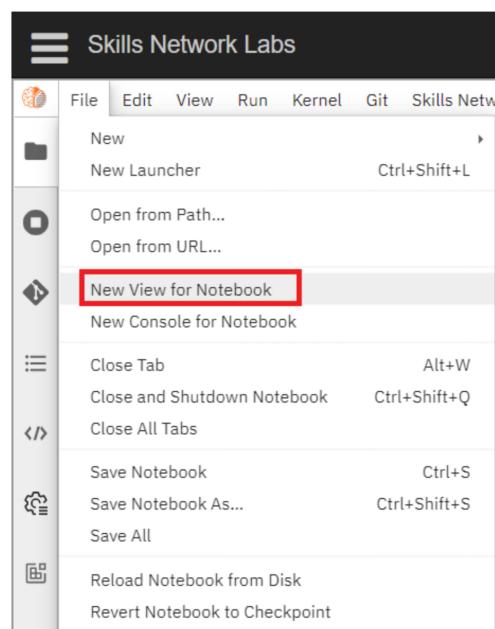


Exercise 6

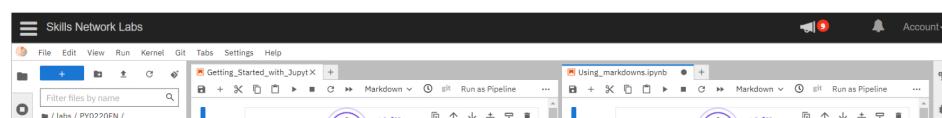
Work with multiple notebooks

You can now view your notebooks at the same time as follows:

- Click **File** menu, and select **New view for notebook** option.



- You can now view the notebooks side-by-side and update it.



Name	Last Modified
Working_w...	2 minutes ago
WebScrap...	3 minutes ago
View_note...	4 hours ago
Using_mar...	4 hours ago
runselect...	3 hours ago
renament...	4 hours ago
opennoteb...	4 hours ago
openfromu...	4 hours ago
openfromu...	4 hours ago
newname...	4 hours ago
Getting_st...	3 seconds ago
Dragandd...	4 hours ago
downloadsh...	4 hours ago



Lab: Getting Started with Jupyter Notebooks

Estimated time needed: 10 minutes

Objectives

After completing this lab, you will be able to:

- Get an overview of code and markdown cells
- Execute an existing code cell
- Insert and delete a code cell
- Write comments in Python
- Create and use Markdown cells



Lab: Using Markdowns in Jupyter Notebooks

Estimated time needed: 15 minutes

Jupyter Notebooks are composed of code and markdown cells. Markdown cells are used to present text, images, etc. and are useful to document and explain the contents of your notebook. In this lab you will become familiar with writing markdown.

Objectives

After completing this lab, you will be able to:

- Identify which Kernel your Jupyter notebook is running

Thank you for completing this lab!

Author(s)

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Other Contributor(s)

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Change log

Date	Version	Changed by	Change Description
2022-12-16	0.3	Steve Hord	QA pass
2022-10-07	0.2	Pam Glazier	Revised
2022-10-07	0.1	Niveditha Pandith	Created initial version

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