

EN1094 - Laboratory Practice I

# A brief guide to using Google Colab

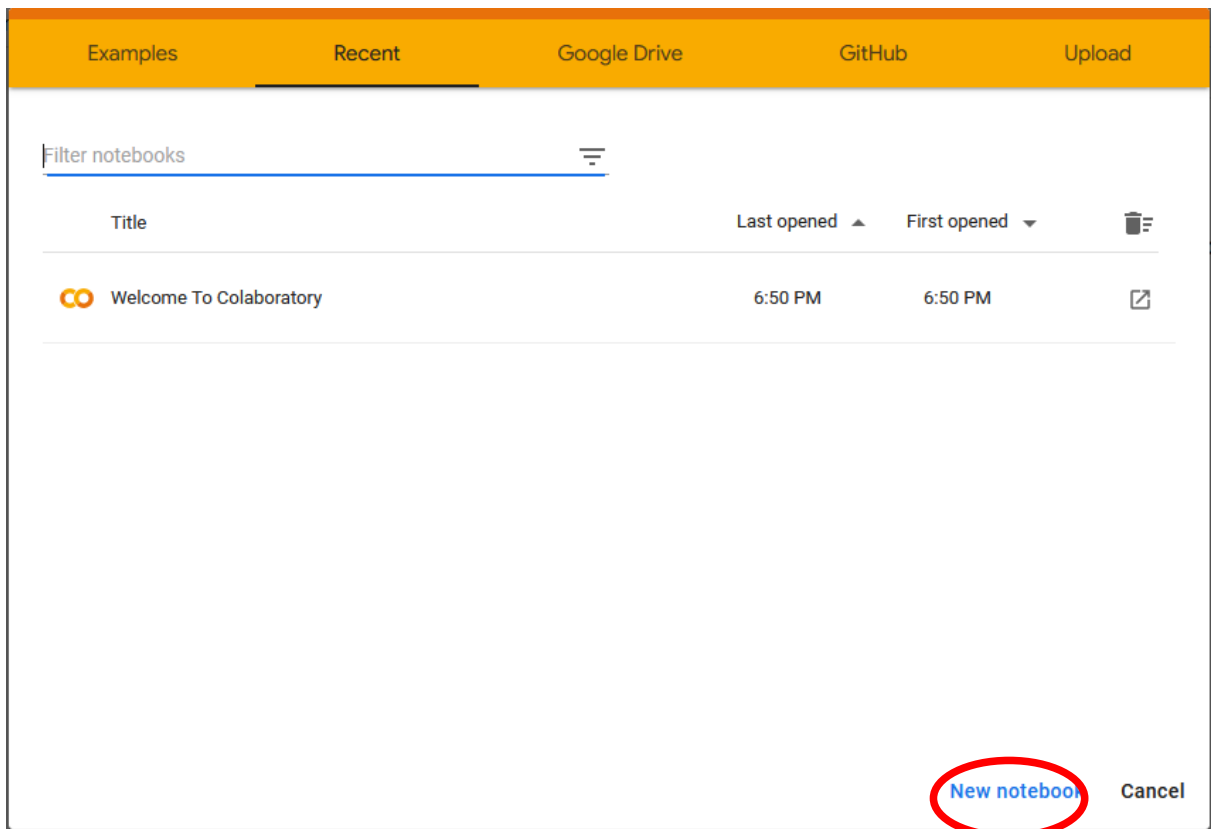
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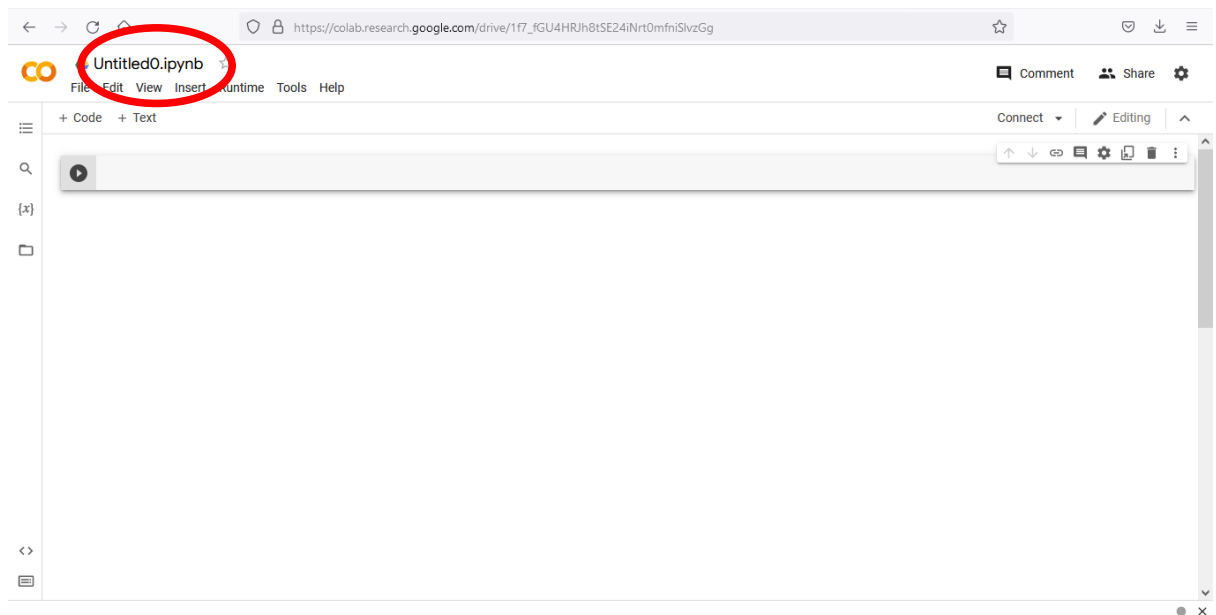
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Follow the below steps to set-up and start working on Google Colab.

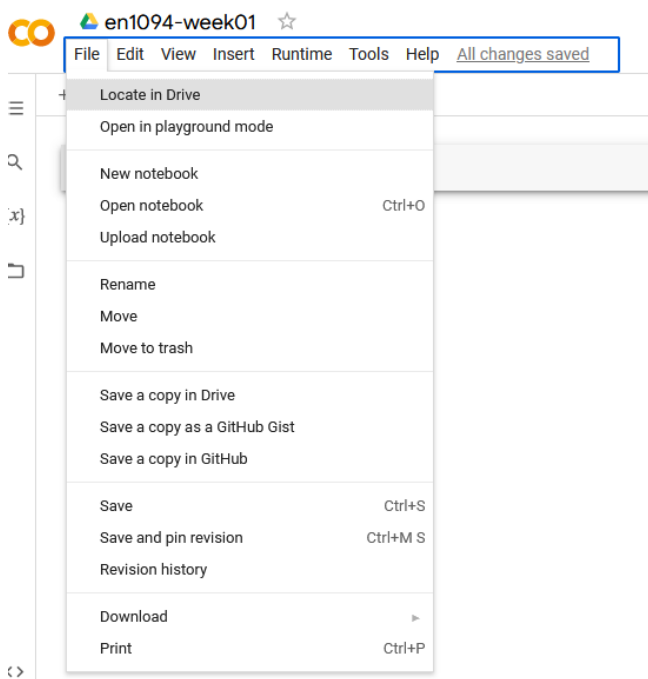
1. Create a Google account if you do not have one already (see <https://support.google.com/accounts/answer/27441?hl=en>).
2. Goto <https://colab.research.google.com/>.
3. Click **New notebook**.




4. Change the name of the Jupyter notebook to **en1094-week01**. We will use this same notebook for the first Signals, Circuits and Systems lab session.



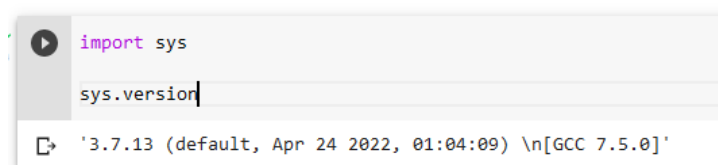
5. Click **File > Locate in Drive** to see where the notebook has been saved. This is where you have to upload complementary files to be used in the script if needed. You can move the notebook to any folder you prefer, but keep the location in mind.





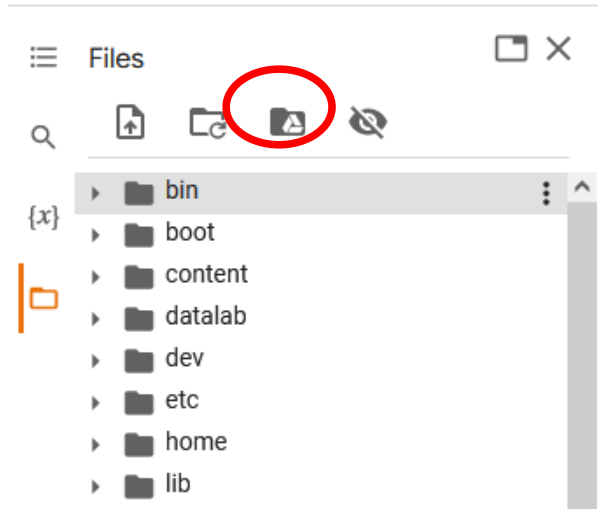
6. On the Jupyter notebook, type and execute the below command to check the Python version. To execute the script, press **CTRL + Enter** on the keyboard or click on the  button.

```
import sys
sys.version
```

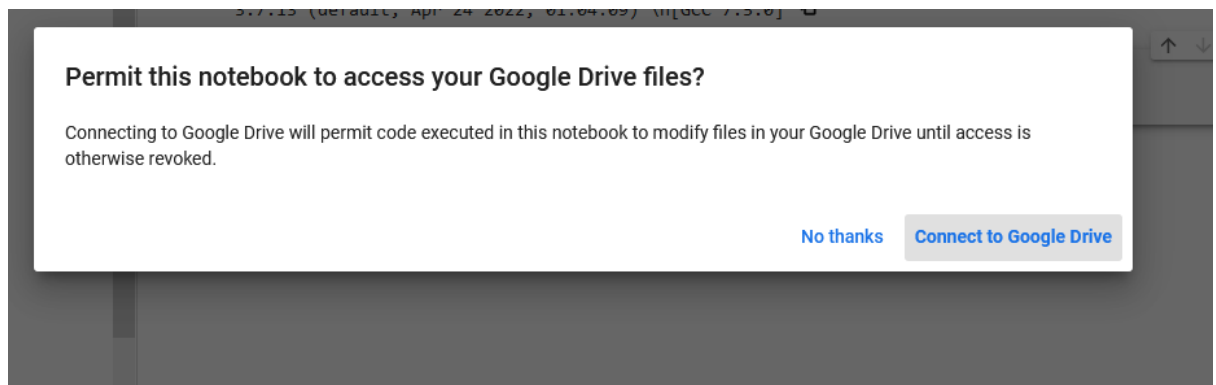
You should get an output similar to the one shown below.



7. Click on the  button to view a tree of files and folders. Click on  icon to start mounting your Google Drive to the Colab environment.



8. Select **Connect to Google Drive**. Sign-in to provide access to the google drive.



Content of your google drive can be found mounted at `/content/drive/MyDrive`.

9. Add a new code cell by clicking on **+ Code** button at the bottom of the previous code cell or by pressing **CTRL + M + B** on the keyboard.



Type

```
import numpy as np
print(np.pi, np.sin(np.pi/2))
```

to print the values of  $\pi$  and  $\sin(\pi/2)$  using the Numpy library. Execute the script and validate the output.

10. Add another code cell, and type in and execute

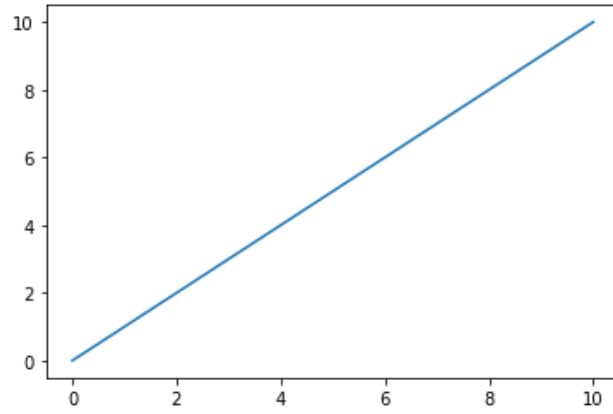
```
import matplotlib.pyplot as plt
plt.plot(np.linspace(0,10,10), np.linspace(0,10,10))
```

to plot the graph of  $y = x$  using the Matplotlib library. You should get an output similar to the figure shown below;

```
import matplotlib.pyplot as plt

plt.plot(np.linspace(0,10,10), np.linspace(0,10,10))
```

[<matplotlib.lines.Line2D at 0x7f00b6415550>]



— The End —