Python for Data Science Installation Guide

For working on data science project using Python there are two popular options, either to install the environment in your local computer or to access the environment through cloud-based services like Colab. However, since Colab provisions a server/virtual machine, one may need to be careful in saving the work in local machine before logging off the Colab. The installations and repositories for using Python software are described below.

1. **Install Anaconda framework**
   Operating system specific version of anaconda can be downloaded from the following link:
   https://www.anaconda.com/download
   Once downloaded, complete the installation. The steps for installation in a windows environment is clearly explained in the following link:
   https://docs.anaconda.com/free/anaconda/install/windows/
   In case of any installation issues, you may google about the issue and find the solution. More about anaconda can be found in the documentation: https://docs.anaconda.com/.
   Alternatively, you may execute the code in the cloud. You may use cloud-based service provided by Anaconda following the link and creating a free account:
   https://anaconda.cloud/sign-in.
   However, for cloud-based environment for running Python code you may also use Google Colab.

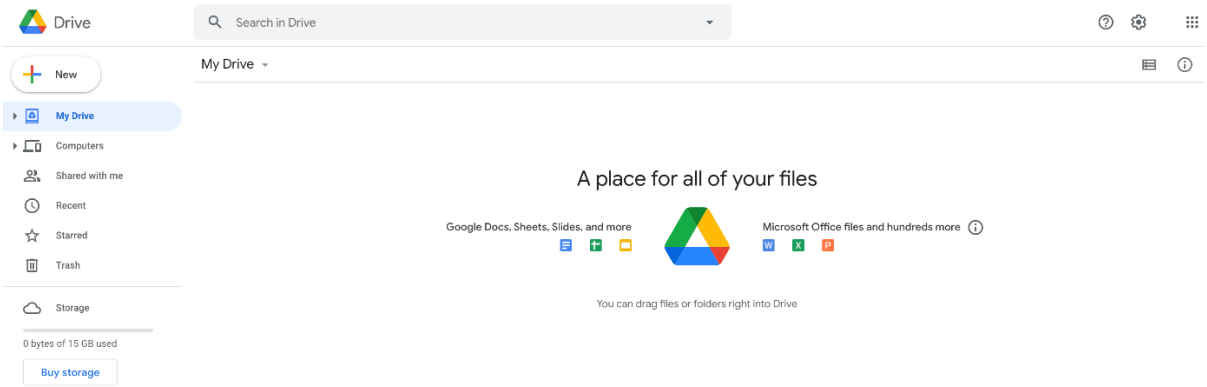
2. **Use Google Colab**
   Colaboratory, or 'Colab' for short, allows execution of Python code in the browser. Its advantages include, zero configuration required, free access to GPUs and easy sharing of codes or projects. You can read about Google Colaboratory using the following link:
   https://colab.research.google.com/notebooks/intro.ipynb

   To launch Google Colab you may follow the below mentioned steps:

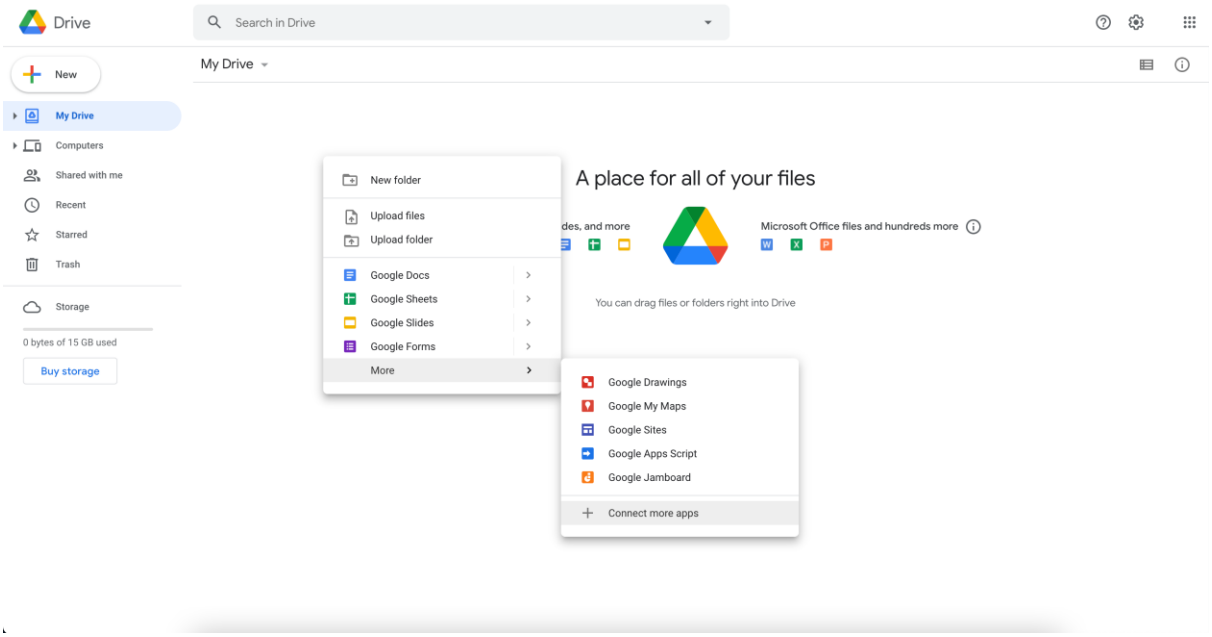
   Step 1: Create a new google account

   This is optional and you may use existing google account as well. However, since one may use google drive to launch google colab, it may unnecessarily read all the files and folders which one may not want to show to others. Go to step 2, if you wish to use your existing google account for working with colab.

   Step 2: Launch google drive
   Login with your google id and launch google drive:



For first time user, google colab may not show up as a connected app. Write click on the drive and click on connect more apps:

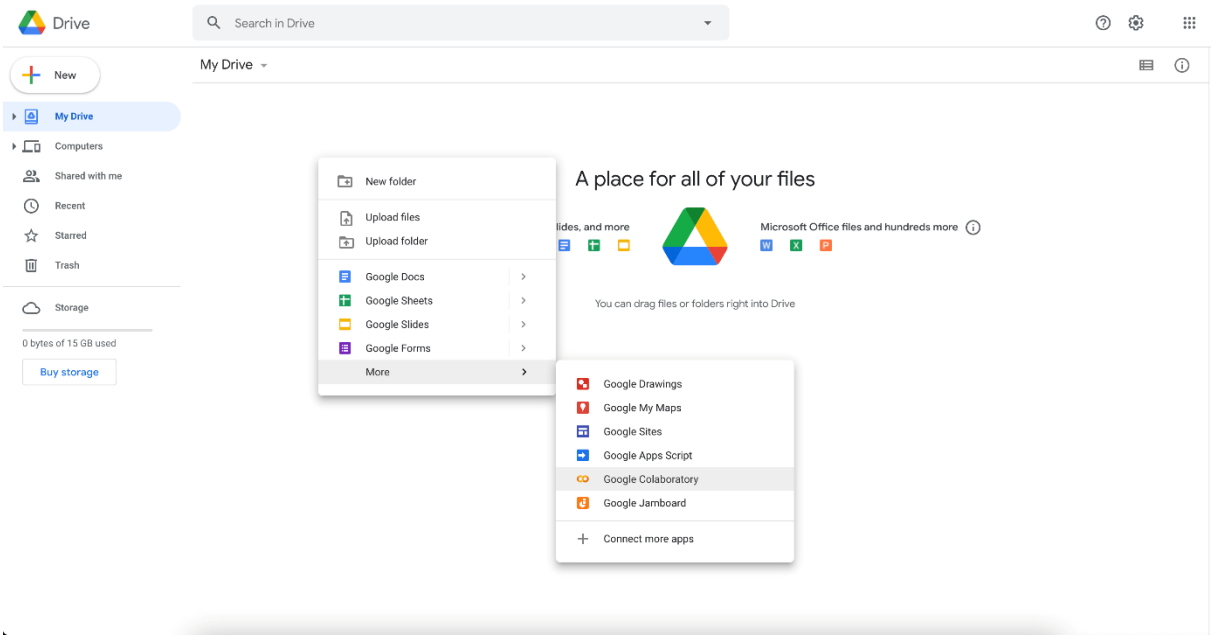


Step 3: Search and install

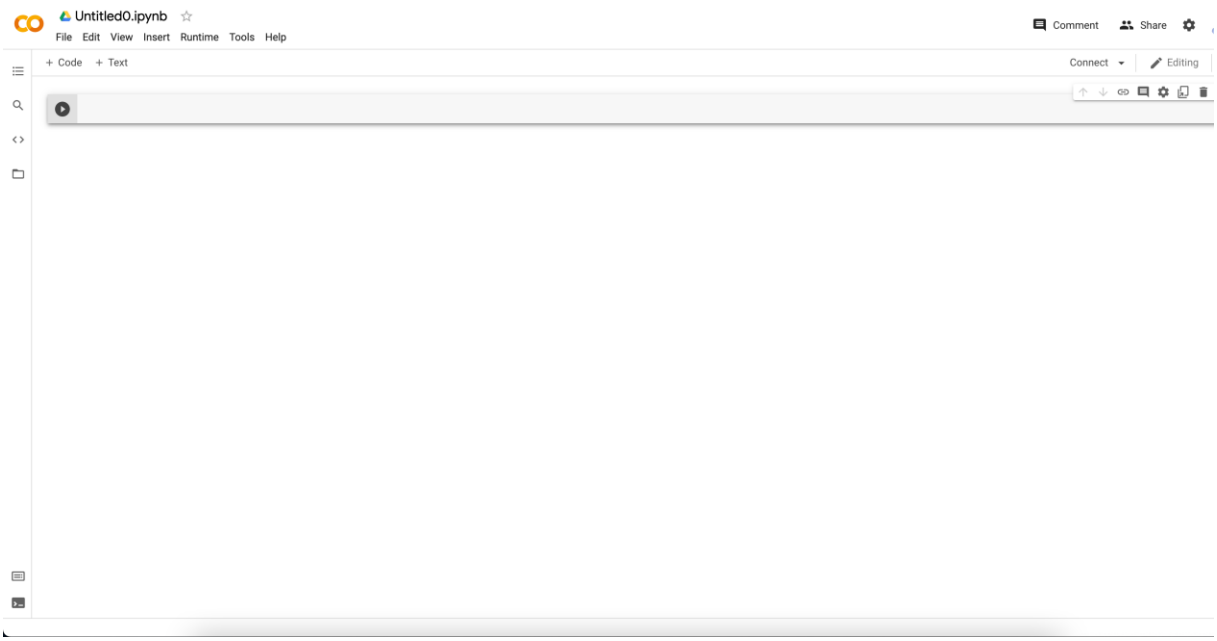
Search for Colaboratory in the browser window and Click on the link to install google colab.
Follow the on-screen instructions (with default options checked/ticked) to finish the installation.

Step 4: Launch google colab

Go to google drive, right click on the window and you will see google colab as a new app:



Click and launch google colab:



All the machine learning (pandas, seaborn, sklearn etc.) and deep learning packages (including keras, tensor flow etc.) are pre-installed.
Congratulations, you are ready to work on your analysis!