Installing Conda in Google Colab

1 Introduction

Installing Conda in Google Colab will allow you to use Conda to install package binaries as neccessary. This is particularly useful when working on Data Science and Machine Learning application in Colab.

2 Installation Steps

2.1 Launch Google Colab

Begin by launching a new Google Colab notebook.

2.2 Insert Code Cell

Next, insert a code cell in your Google Colab notebook and paste the following commands:

```
# INSTALL CONDA ON GOOGLE COLAB
!wget https://repo.anaconda.com/miniconda/Miniconda3-
    latest-Linux-x86_64.sh
!chmod +x Miniconda3-latest-Linux-x86_64.sh
!bash ./Miniconda3-latest-Linux-x86_64.sh -b -f -p /
    usr/local
import sys
sys.path.append('/usr/local/lib/python3.7/site-
    packages')
```

You might be wondering what each line does. Here's a brief explanation:

- **Line 1:** Comment for clarification, explaining the purpose of the code block.
- **Line 2:** Uses 'wget' to download the Miniconda installation script from the Anaconda website.
- **Line 3:** Applies 'chmod +x' to make the downloaded script executable.
- **Line 4:** Executes the installation script to install Conda.

- **Lines 5–6:** Adds the site-packages directory to the system path, ensuring Python packages are correctly recognized.

2.3 Run the Code Cell

Click on the play button found to the left of the code cell in your Google Colab notebook to run the code. After a few moments, you should see a confirmation

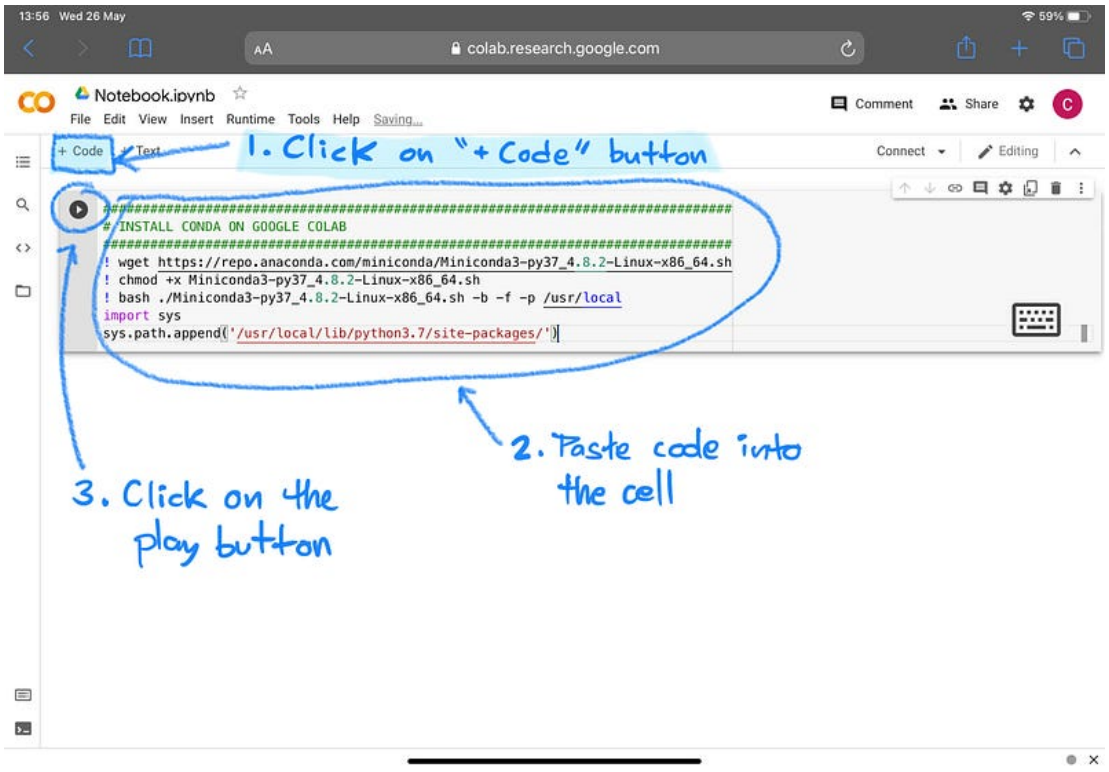

Figure 1: Screenshot of how to install Conda in Google Colab

that Conda has been successfully installed.

3 Installing a Library in Conda

In addition to using ‘pip‘ like with:

```
!pip install pandas
```

Conda offers another method for installing Python libraries. For example, to install Pandas using Conda, the command is:

```
!conda install pandas
```

Certain libraries are available on designated conda channels, necessitating the use of the -c tag to identify the channel. For instance, installing the rdkit library typically involves a complex setup of various dependencies. However, conda simplifies this process, allowing for straightforward installation of rdkit:

```
!conda install -c conda-forge rdkit
```

4 Conclusion

Maintaining the installation code cells at the beginning of your notebook is a wise practice. This arrangement guarantees that all essential packages are in place before beginning the analytics part of your workflow.