

Let's explore **three different ways** to import a CSV file into a Google Colab notebook and work with it:

## 1. Load Data from Local Drive:

- To upload a CSV file from your local drive, follow these steps:
  1. In a Colab cell, run the following code:
  2. `from google.colab import files`
  3. `uploaded = files.upload()`
  4. Click on "Choose Files" and select the CSV file you want to upload from your local drive.
  5. Once uploaded, use the following code snippet to import it into a pandas dataframe:
  6. `import pandas as pd`
  7. `df = pd.read_csv(io.BytesIO(uploaded['file.csv']))`
  8. `print(df)`

This will display the contents of the CSV file in the dataframe.

## 2. Load Data from GitHub:

- If your dataset is hosted on GitHub, follow these steps:
  1. Go to the dataset in your GitHub repository.
  2. Click on "View Raw" to get the raw dataset link.
  3. Copy the link and use it as a parameter in the `read_csv()` function to create the dataframe:
  4. `url = 'copied_raw_github_link'`
  5. `df = pd.read_csv(url)`

The dataframe will contain the data from the GitHub-hosted CSV file.

## 3. Load Data from Your Google Drive:

- There are two ways to import datasets from your Google Drive:
  - **Using PyDrive (Complex Method):**
    1. Install the PyDrive library by running:
    2. `!pip install -U -q PyDrive`

3. Authenticate your Google account:
4. `from google.colab import auth`
5. `auth.authenticate_user()`
6. Get the shareable link of the CSV file in your Drive and store it in a string variable.
7. Use the following code to import the file into a dataframe:
8. `link = 'your_drive_csv_link'`
9. `id = link.split("/")[-2]`
10. `downloaded = drive.CreateFile({'id': id})`
11. `downloaded.GetContentFile('your_file.csv')`

#### ▪ **Simpler Method:**

1. Upload the CSV file to your Google Drive.
2. In Colab, use the path of the CSV file to read it into a dataframe:
3. `df = pd.read_csv('path_of_the_csv_file')`

The dataframe will now contain the data from your Google Drive-hosted CSV file.