changlabXenvision
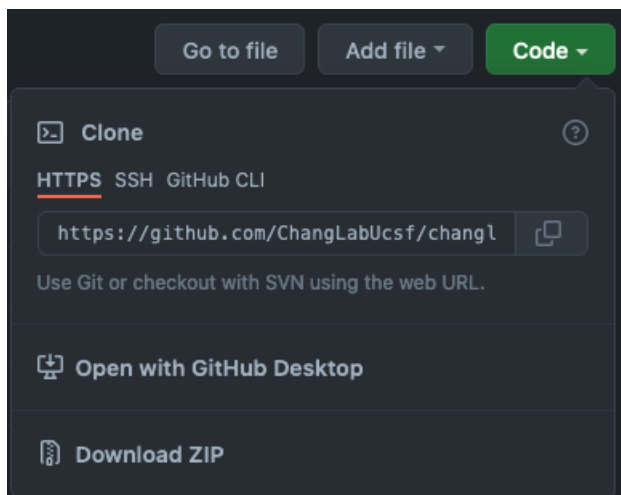
This coding exercise was created by members of the Chang Lab for internship students with the ENVISION Program at UCSF.

1. Using Google and Google Chrome

1. We'll need to use Google Chrome for this, so download and install that if you don't already have it.
2. We'll also need a Google account to use Google Drive, create a free account if you don't have one already.

2. Downloading the code

1. If you're not already at this link, go here to download the code.

2. First, we'll download a `.zip` file containing all the code and resources in this repository. Find the green button at the top left corner of this page that says "Code" and select the "Download ZIP" option.

3. Unzip this folder (on a Mac, simply double click the zipped file; on Windows, right click and select "Extract All" and follow the instructions). You should now see the contents of the folder.

4. Upload this folder to your Google Drive (under the "My Drive" heading. Don't put it within any folders). We'll be using Google Colab to interact with the code. More details on that below.
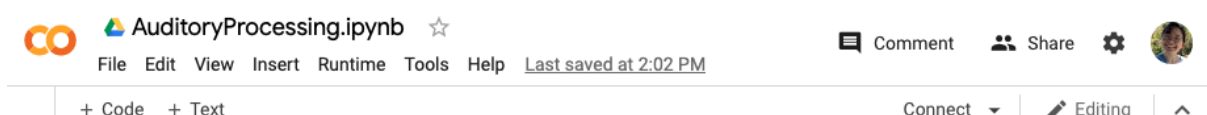
3. Setting up Google Colab

Google Colab is a great way to execute code without having to install Python yourself. Google Colab opens notebooks through your Google Drive, so you can save your progress as you make changes.
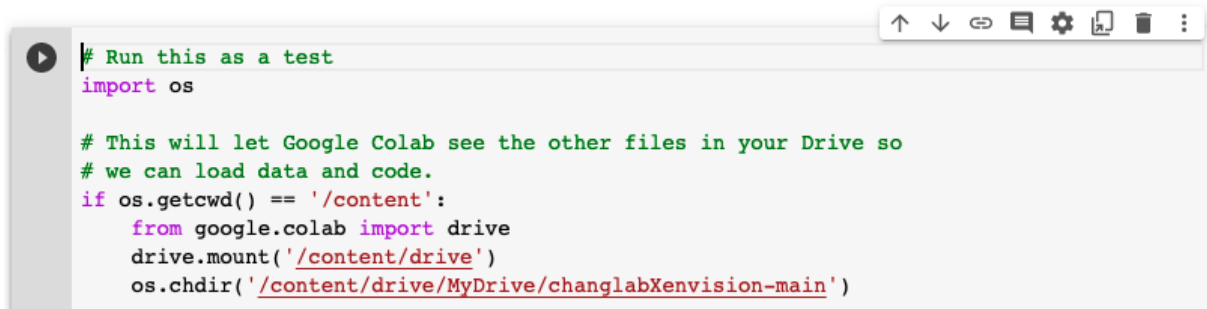
1. Install the Google Colab extension in Chrome.
2. Restart your Chrome browser by closing it and opening it again.

4. Testing that everything works!

1. In a Google Chrome browser, navigate to your Google Drive folder with the notebook we'll be using (`AuditoryProcessing.ipynb`).
2. Double click on the file to open it--a tab should open with the Colab interface.

3. Try executing the first code cell. You can do this by clicking on the cell and pressing `Shift + Enter` or by clicking the "Play" button on the left side of the cell. This cell will import one Python package and try to set up your Google Drive so that we can load code and data from our Google Drive folder.

```python
# Run this as a test
import os

# This will let Google Colab see the other files in your Drive so
# we can load data and code.
if os.getcwd() == '/content':
    from google.colab import drive
    drive.mount('/content/drive')
    os.chdir('/content/drive/MyDrive/changlabXenvision-main')
```

4. It will ask you to open a link and log into your Google account, give you a token, which you'll copy into the cell. If you have trouble at this step, we'll walk through this at the beginning of the tutorial.

5. Otherwise, you're all set!