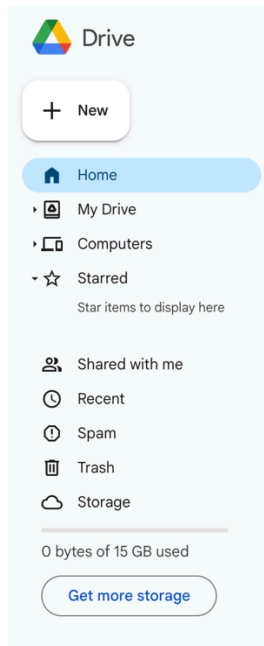
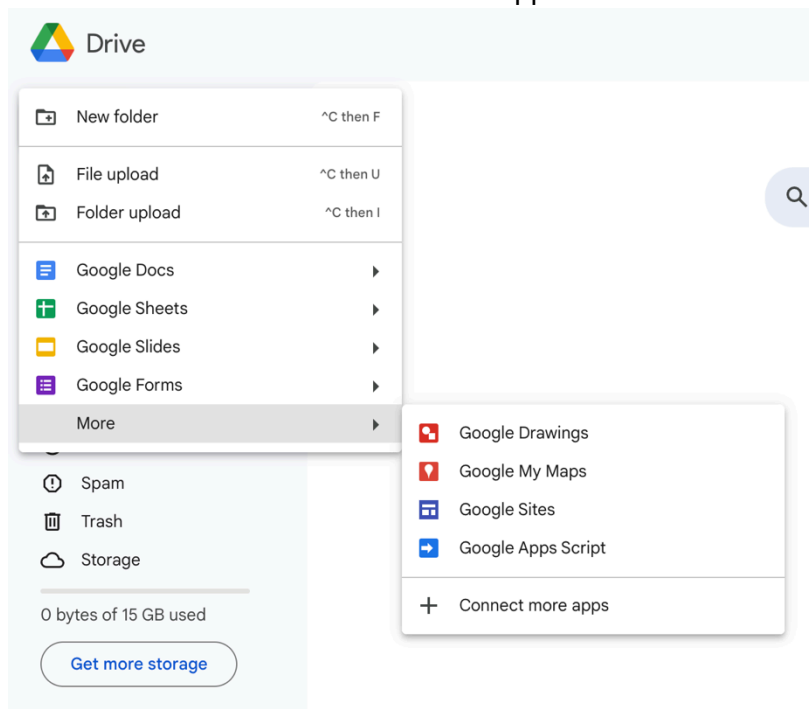


# Google Colab setup

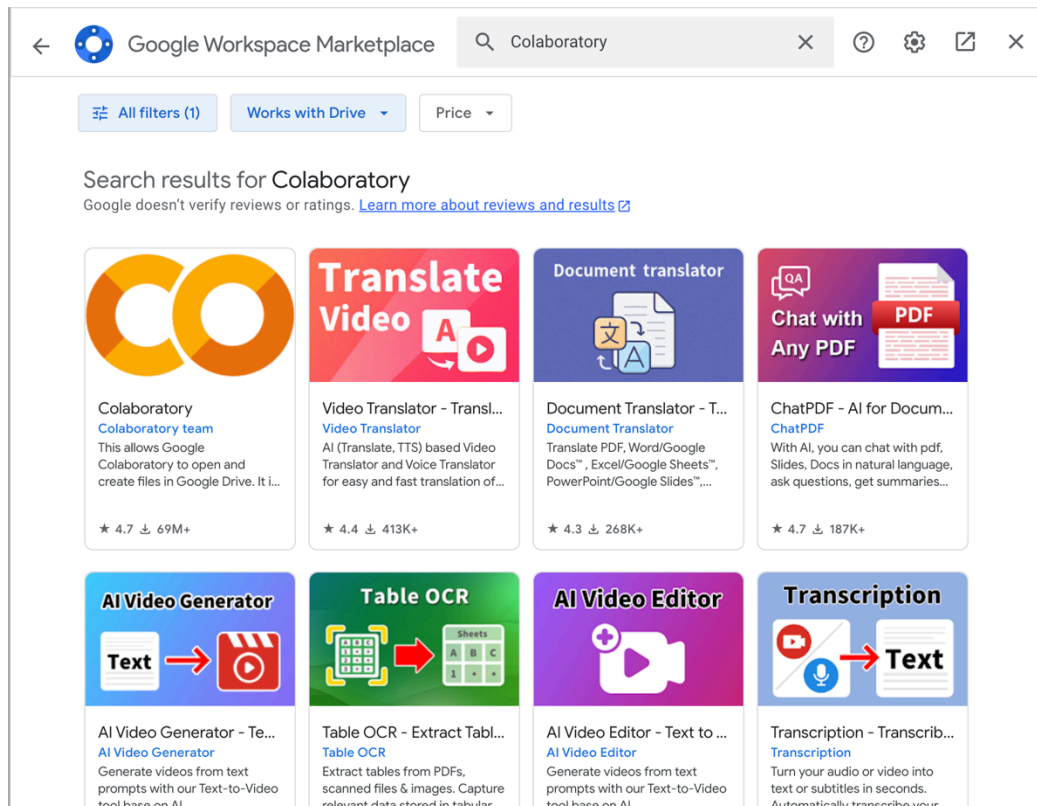
1. Sign into drive.google.com (may need to make a new account).
2. Click on 'Home'.



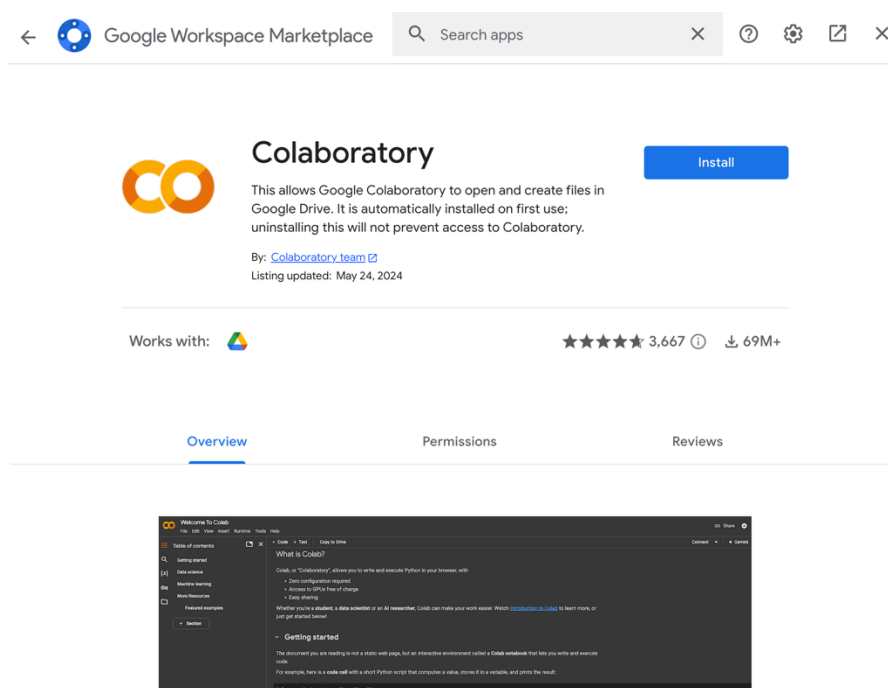
3. Click on 'More' then 'Connect more apps'.



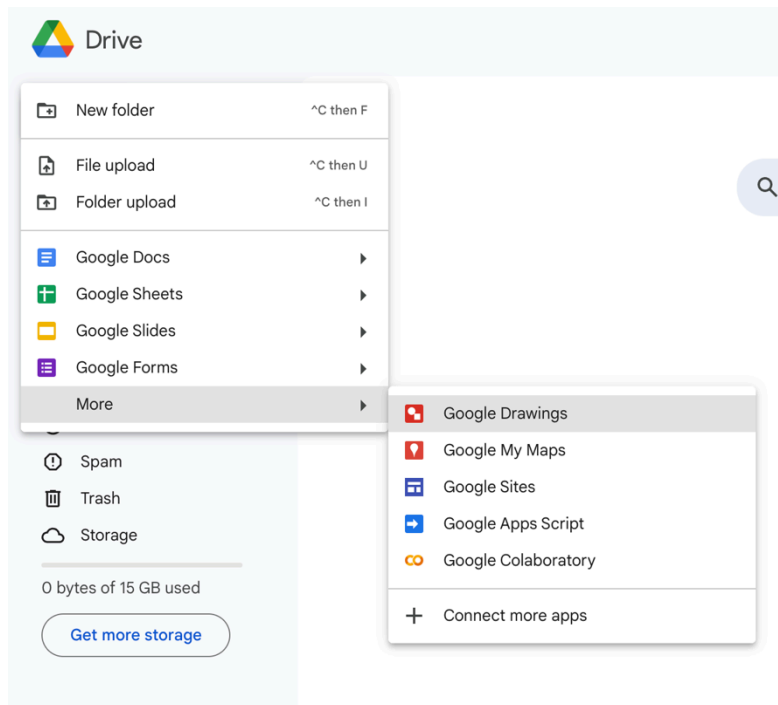
#### 4. Search for 'Colaboratory'.



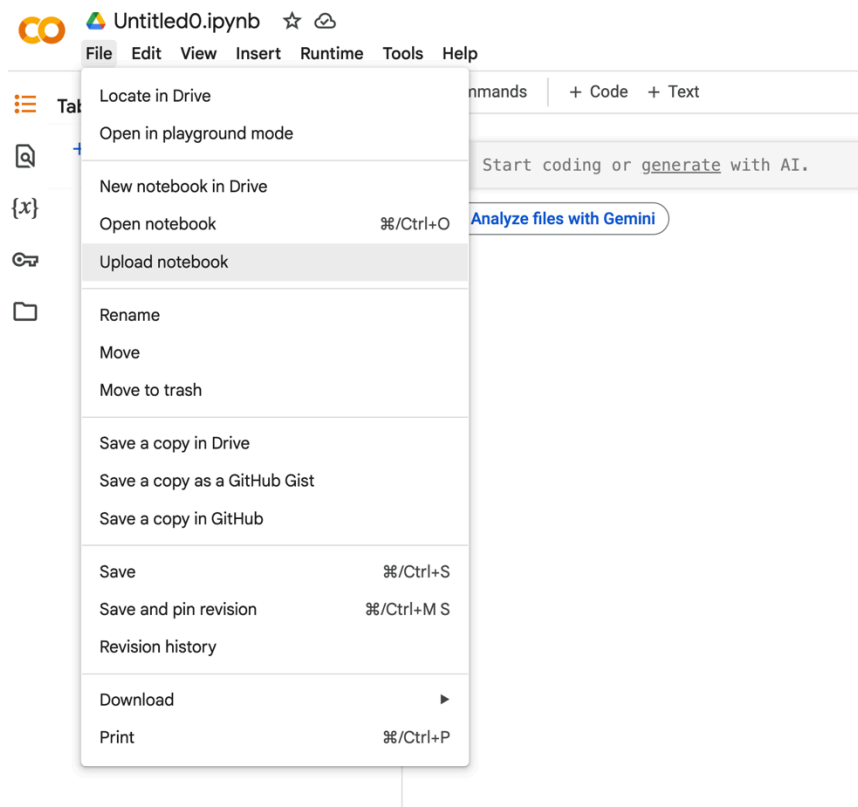
#### 5. Click on 'Install' and follow the instructions.



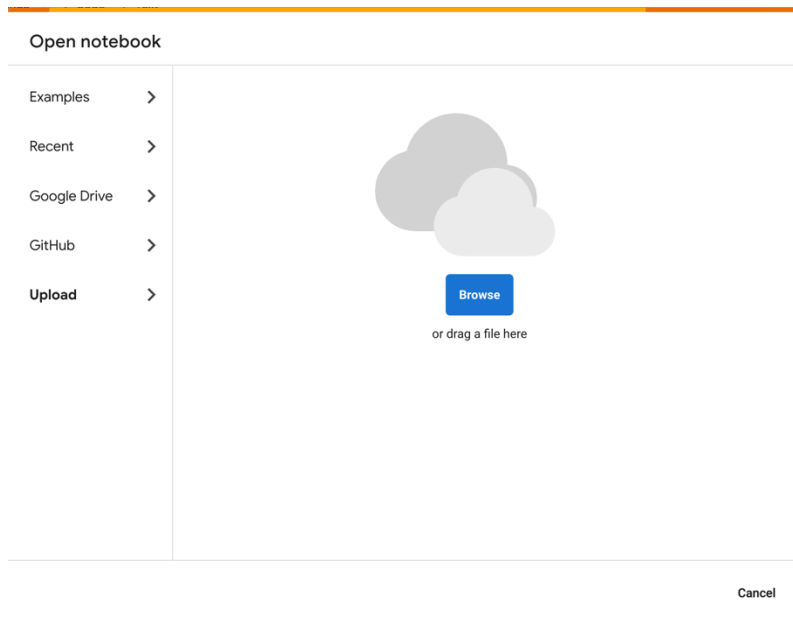
6. Once installed, Click on 'Home' then 'More' then 'Google Colaboratory'.



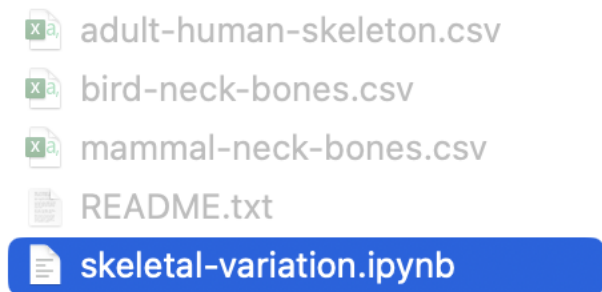
7. Click on 'File' then 'Upload notebook'.



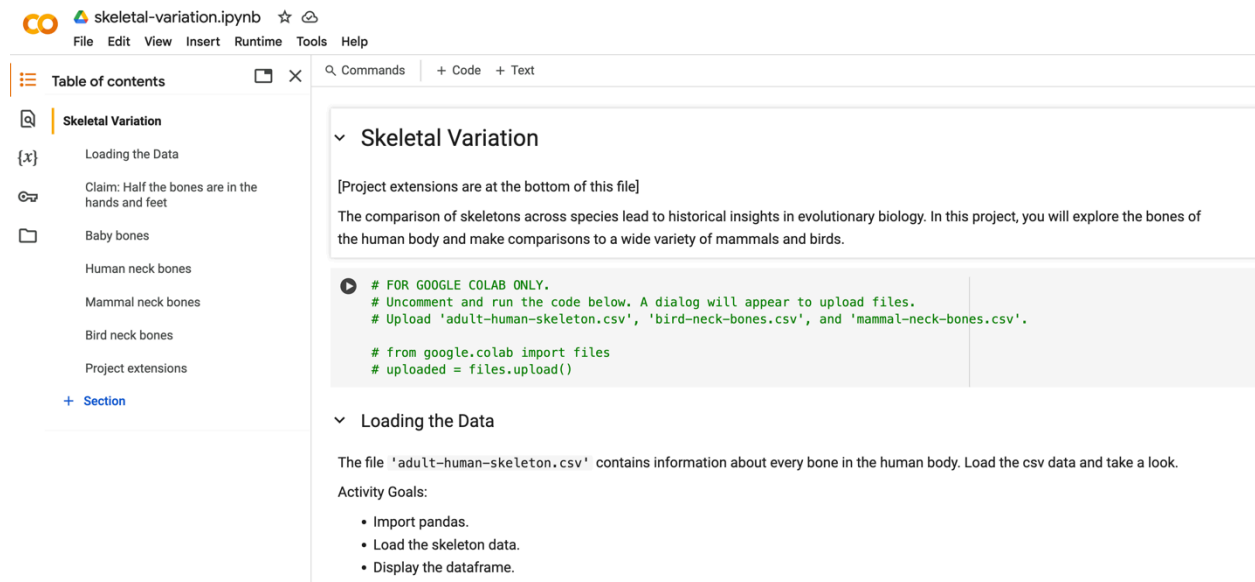
8. Click on 'Browse'.



9. Find the interactive python notebook file (.ipynb) from your local device. Note: first unzip the downloaded folder.



10. You have now uploaded your python notebook.



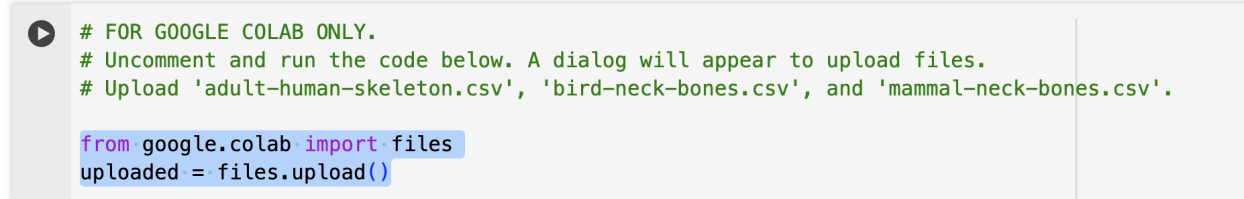
The screenshot shows a Google Colab notebook interface. The top bar includes the Colab logo, the file name 'skeletal-variation.ipynb', and standard menu items (File, Edit, View, Insert, Runtime, Tools, Help). Below the menu is a 'Table of contents' sidebar on the left, listing sections: 'Skeletal Variation', 'Loading the Data', 'Claim: Half the bones are in the hands and feet', 'Baby bones', 'Human neck bones', 'Mammal neck bones', 'Bird neck bones', and 'Project extensions'. The main content area is titled 'Skeletal Variation' and contains a paragraph about the project's goal: 'The comparison of skeletons across species lead to historical insights in evolutionary biology. In this project, you will explore the bones of the human body and make comparisons to a wide variety of mammals and birds.' Below this is a code cell with a play button icon, containing the following code:

```
# FOR GOOGLE COLAB ONLY.  
# Uncomment and run the code below. A dialog will appear to upload files.  
# Upload 'adult-human-skeleton.csv', 'bird-neck-bones.csv', and 'mammal-neck-bones.csv'.  
  
from google.colab import files  
uploaded = files.upload()
```

Below the code cell is another section titled 'Loading the Data' with a paragraph: 'The file 'adult-human-skeleton.csv' contains information about every bone in the human body. Load the csv data and take a look.' It also lists 'Activity Goals':

- Import pandas.
- Load the skeleton data.
- Display the dataframe.

11. Now you need to upload the CSV files to session storage. Uncomment the code below (remove the "# " from both lines). Click the play button.



The screenshot shows a code cell with a play button icon. The code is as follows:

```
# FOR GOOGLE COLAB ONLY.  
# Uncomment and run the code below. A dialog will appear to upload files.  
# Upload 'adult-human-skeleton.csv', 'bird-neck-bones.csv', and 'mammal-neck-bones.csv'.  
  
from google.colab import files  
uploaded = files.upload()
```

12. Click on 'Choose Files'.

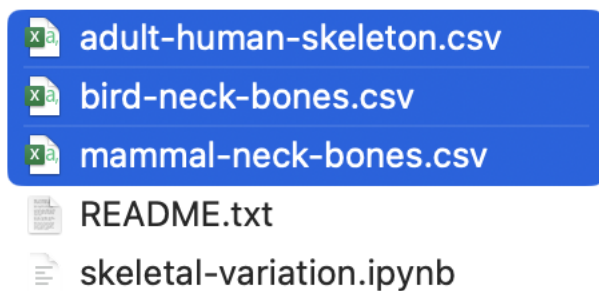


The screenshot shows the same code cell as in the previous block, but with a file upload dialog box open below it. The dialog box has a title bar with a close button (X) and a play button icon. It contains the following text:

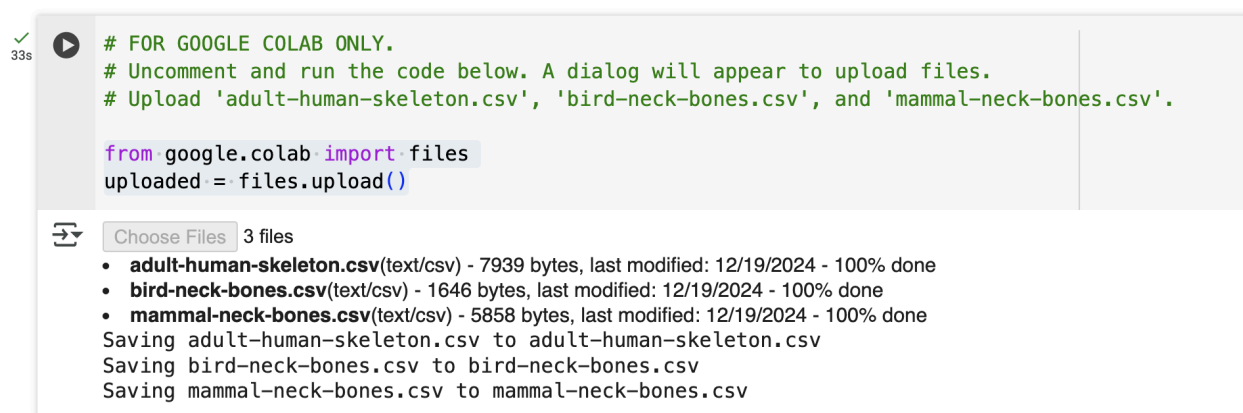
```
# FOR GOOGLE COLAB ONLY.  
# Uncomment and run the code below. A dialog will appear to upload files.  
# Upload 'adult-human-skeleton.csv', 'bird-neck-bones.csv', and 'mammal-neck-bones.csv'.  
  
from google.colab import files  
uploaded = files.upload()
```

Below the code is a button labeled 'Choose Files' and a button labeled 'Cancel upload'.

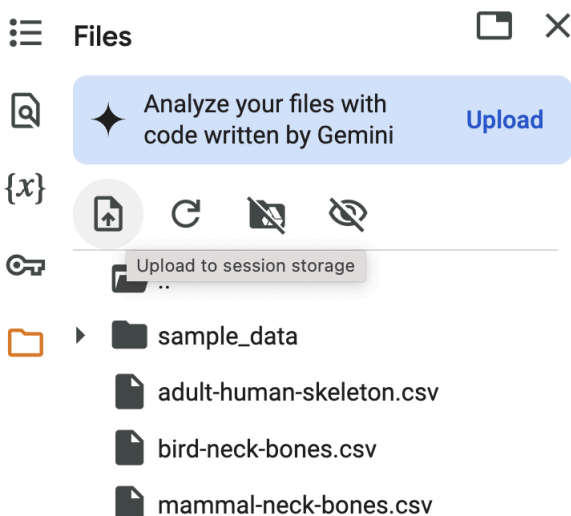
13. Select the data files that you need for your project.



14. Those files have now been uploaded into your session storage.



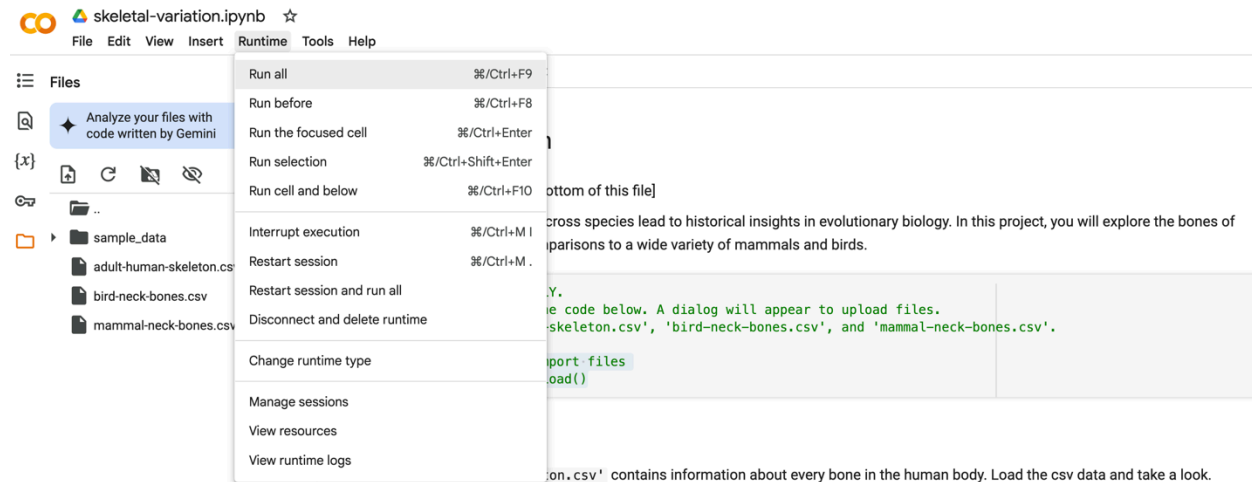
15. You can find those files from the menu when you click on the 'Files' icon. You can also upload files directly by clicking on the 'Upload to session storage' button within the 'Files' folder.



16. Now comment again the two lines of code that import files.

```
[ ] # FOR GOOGLE COLAB ONLY.  
    # Uncomment and run the code below. A dialog will appear to upload files.  
    # Upload 'adult-human-skeleton.csv', 'bird-neck-bones.csv', and 'mammal-neck-bones.csv'.  
  
    # from google.colab import files  
    # uploaded = files.upload()
```

17. Run the code for the project. Click on 'Runtime' then 'Run all'.



18. Now you can edit the project and continue your discoveries.