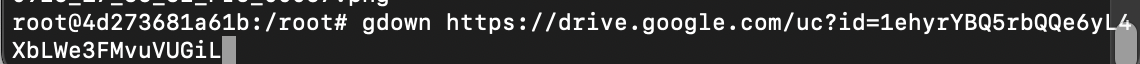
1. First part of this project is to get the data on to jarvis lab, following the below steps

* Started a CPU machine
* Ceated an SSH key and SSHed into CPU terminal
* Install commandline tool gdown to download zipped data from google drive



* Download the zipped file from folder <https://drive.google.com/uc?id=1ehyrYBQ5rbQQe6yL4XbLWe3FMvuVUGiL>



* Unzip the folder



1. Steps to import starter code to jarvis labs

* Open the starter code in google colab
* Connect to Github and commit from colab
* Open VS Code for Web from jarvis lab
* Install Jupyter file extension from Microsoft
* Connect to github from VS Code
* Clone github repo
* gh repo clone gautaman8/gesture-recognition

1. Install the requirements

* make a list of requirements in requirements.txt
* pip install requirements.txt
* copy the data to below folder
* notebooks/storage/Final\_data/Collated\_training/

1. Create a generator

* If image size is 120x160, don’t do additional processing
* If image size is 360x360, convert it to 160x160 and crop the excess to reduce it to 120x160
* In a later stage, this process was inverted in the format of 160x120 and that caused a data mismatch in the generator
* Also, the number of channels are reduced to 1 to simplify the computations. This means, color videos are converted to grayscale
* when there aren’t sufficient files in a single batch, that caused out of bounds error

1. Experiment 1 - Batch size 16 (Too big and reduced it to 8) to avoid the memory overload
2. Define layer of the models with different layers and weights
3. Compile the models
4. Create a training and validation generator
5. Generate the model by running 10 epochs.

* the model is able to predict with close to 98% accuracy by the 10th epoch.

1. Validated the model and found it to be 60% accurate.