Steps to Run Object Detection for Point cloud data

STEP1:

Create a folder “LidarProject” in your google drive.

Upload the project “PIXOR.zip” and “34epoch” into that location, and run the below command

```
from google.colab import drive
drive.mount('/content/drive')
```

STEP2:

Then you have to compile the c-library of the project using the below command

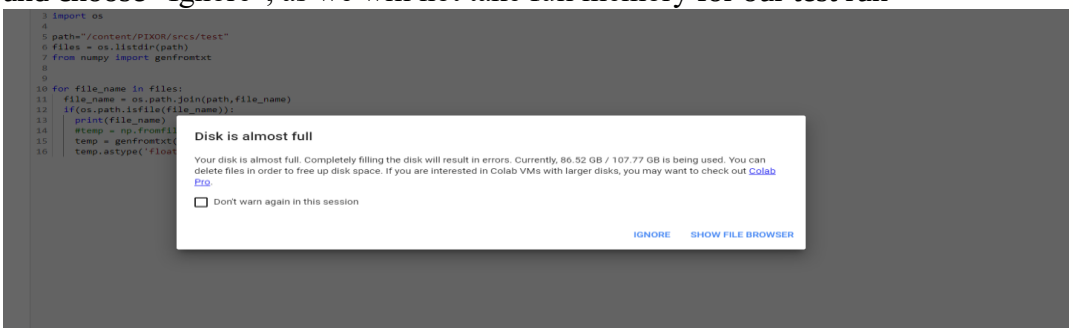
```
!pip install shapely numpy matplotlib
!unzip -qq /content/drive/MyDrive/LidarProject/PIXOR.zip
%cd PIXOR/srcs/preprocess
!make
!ls
%cd ..
```

STEP3:

You need KITTI library for this, to save time we have uploaded the library into google drive as well. If you just want to give it a try then you can use the following commands to get the library in google colab

```
!wget https://s3.eu-central-1.amazonaws.com/avg-kitti/data_object_velodyne.zip
!wget https://s3.eu-central-1.amazonaws.com/avg-kitti/data_object_label_2.zip
!unzip -qq data_object_velodyne.zip
!unzip -qq data_object_label_2.zip
!ls
```

While in this operation you might find the below pop-up, you need not have to worry about it and choose “Ignore”, as we will not take full memory for our test run



```
Note: This will take a while, so to avoid this time delay as mentioned
above we uploaded both the datasets on google drive in the folder that we
created and ran the below command just to unzip

!unzip -qq /content/drive/MyDrive/LidarProject/data_object_velodyne.zip
!unzip -qq /content/drive/MyDrive/LidarProject/data_object_label_2.zip
!ls
```

STEP4:

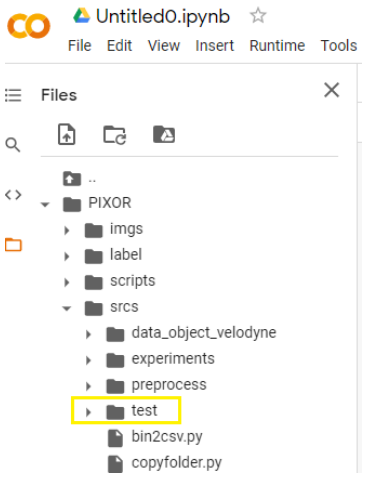
Project expects files in certain folder so let's go ahead and create them now

```
!mkdir data_object_velodyne
!mkdir test
!python3 copyfolder.py
```

STEP5:

Let's now take the Point cloud data that we have created from unity and place it "test" folder marked in yellow box(you can drag and drop) as Project expects the *.csv file in that location. (You can find the test data in the project folder under "TestData") run the command below

```
!python3 csv2bin.py
```



STEP6:

Run the below command and you should find the output in the "srcs" folder (try refresh if you don't see the Prediction.png file)

```
!python3 object_detector.py
```