README

1. First, we need to split the train dataset into train and val in the ratio 9:1. For this run the split dataset notebook (*Split dataset.ipynb*) in Split dataset folder. Please note the directory where you are splitting as this would be required to be pasted in the *load_datasets() function* in *util.py and Sweep_partA.ipynb.* This util file will be imported in all subsequent files except *Sweep_partA.ipynb* because it was run in colab separately.
2. To reproduce the sweep results run *Sweep_PartA.ipynb.* This file was run in colab so few libraries like *mount drive* can be commented out and the dataset directory must be pasted in the *load_datasets() function.*
3. To reproduce the best model test accuracy run *Best Model Test Accuracy.ipynb*. This notebook first cell has best model configurations. Therefore, by changing the configurations you can run on custom configuration as well.
4. To upload test dataset predictions in wandb run *Test Set Predictions.ipynb.*
5. To upload first convolution layer filters in wandb run *Visualizing Filters of Conv1.ipynb.*
6. To upload results of guided backpropagation in wandb run *Guided BackPropagation.ipynb.*
7. **Please note that all files from serial 4 above will run only after running the *Best Model Test Accuracy.ipynb from serial 3*.** Since it saves the best model.