

**There are 2 Python (.py) files attached with the submission.**

The file named “PredictionMAIN\_Cloud\_Structures” is the main code for the prediction and the 2<sup>nd</sup> file “EDA\_Cloud\_Structures” is for the Explatory Data analysis we did for the project.

**STEPS:**

1. “EDA\_Cloud\_Structures.py” can be directly executed.
2. For the 2<sup>nd</sup> file, “PredictionMAIN\_Cloud\_Structures” the code can be executed by creating folders for each and every cloud separately.
3. The images should be in the same folder from where you will run the code.
4. There will be 4 folders for 4 types of clouds.
5. For creating these folders, you just have to search for “imwrite” and include them in one folder. For example, for first cloud name “Flower”, you have to create a folder for flower including the images and augmented images.
6. Similarly, for the images which are resized using the Horizontal and Vertical flips are to be put in a separate folder and you can access it by searching for “IM\_H” or “IM\_V”.
7. Once you have made these folders, the code is ready to function.
8. Please note that the data is too big to upload with the submission as the initial data was around 5 GB and as we augmented the images and worked on it, it climbed to around 50-60 GB. The samples have been portrayed perfectly in the report of the work.