**Majority\_Vote(filename, dataDir, svmResultDir)**

Majority Voting is a Track classification method. To do this you need Track info text file, image frame extracted from ImageExtraction function, SVM results which is obtained from FeatureExtraction function and 3 getImageDescriptor function which are in Frame classification directory.

**INPUTS:**

1. filename is the name of the video which you are using it as a test to obtain Track classification results.
2. dataDir is the directory of you video.avi , track info text file and you output for the track classification results.
3. svnResultDir is the directory of the SVM training results.

To use the majority voting function you should specify what types of feature extraction you are using to extract your testing frame’s feature, which should be consistent with the training feature extraction method. So if your SVM training results exist for the chosen feature extraction method then you just need to uncomment the feature extraction method inside Majority\_Vote function.

**OUTPUT:**

The output of this function is a table (.dat) which has the track ID of each track and the classified label of the track as this format [1,Car]. The file will be save in this format: ‘001\_2014-07-01\_11-00-01 - TackLabels\_PHOW.dat’ which includes the filename and the feature extraction method.

\*To continue testing the majority voting you need a ground truth table to compare with the obtained results from majority voting. The ground truth should be obtained manually by looking at the extracted frames and track objects and labeling them in the same format as the extracted table. (Copy one of the extracted .dat file and overwriting the label names and renaming the file as this format: ‘001\_2014-07-01\_11-00-01 - GroundTruth.dat’)

**Majority\_Voting\_Test(filename, dataDir)**

This function reads the ‘001\_2014-07-01\_11-00-01 - TackLabels\_PHOW.dat’ and then compare the labels with ‘001\_2014-07-01\_11-00-01 - GroundTruth.dat’ then calculate accuracy.