CSCI5561 du000078@umn.edu Haoyuan Du 5500151
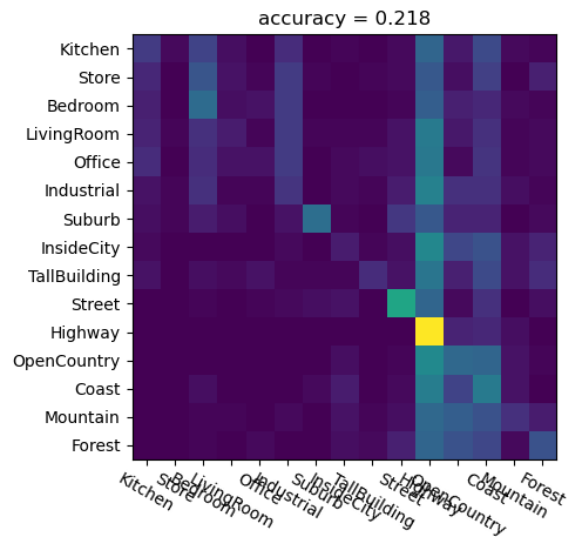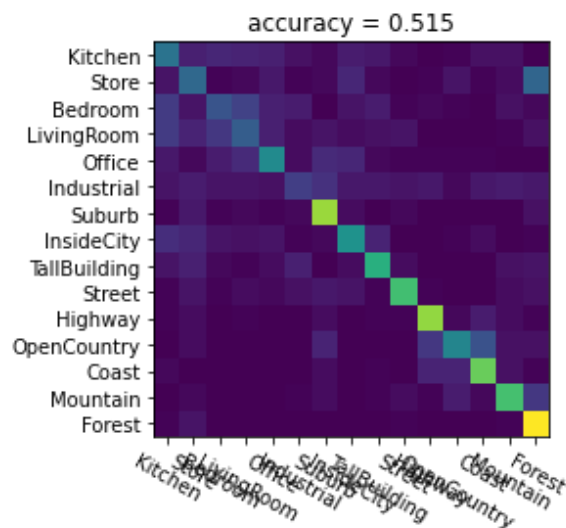HW3 Write up

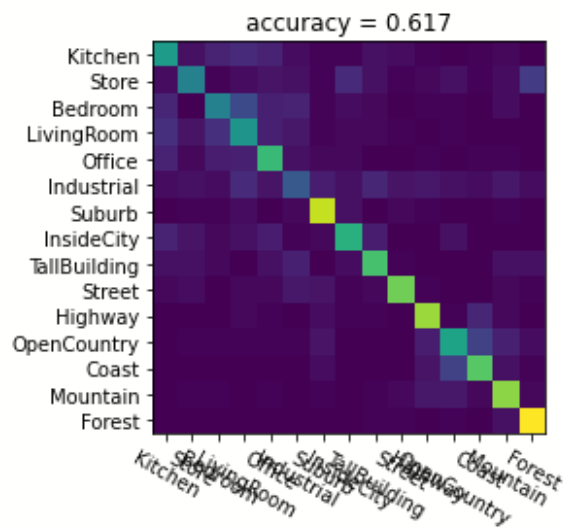Tiny Image KNN Classification result:

After trying several K values, the best K is 9 according to the history (The accuracy is 0.218). We can see the accuracy of highway is good, but other columns are bad.

The KNN-BoW Classification result:

After trying tons of different parameters, one of the best combinations is size&stride: [26,26], k=9, iteration 200, dic_size 220, accuracy: 0.517. We can see the diagonal is way better than the previous one.

The BoW+SVM BoW Classification result:

Again, one of the best combinations of parameters is: stride & size:
[22,22], iter=200, dic=220, C=0.5. The accuracy is about 0.611~0.618. We can see the diagonal becomes more yellowish. Also, accuracy is increasing to 0.617.

For more details of parameter combinations, please check the comments in my code.