Assignment 6 - 6367

Problem 1 (KNN Tiny Model)

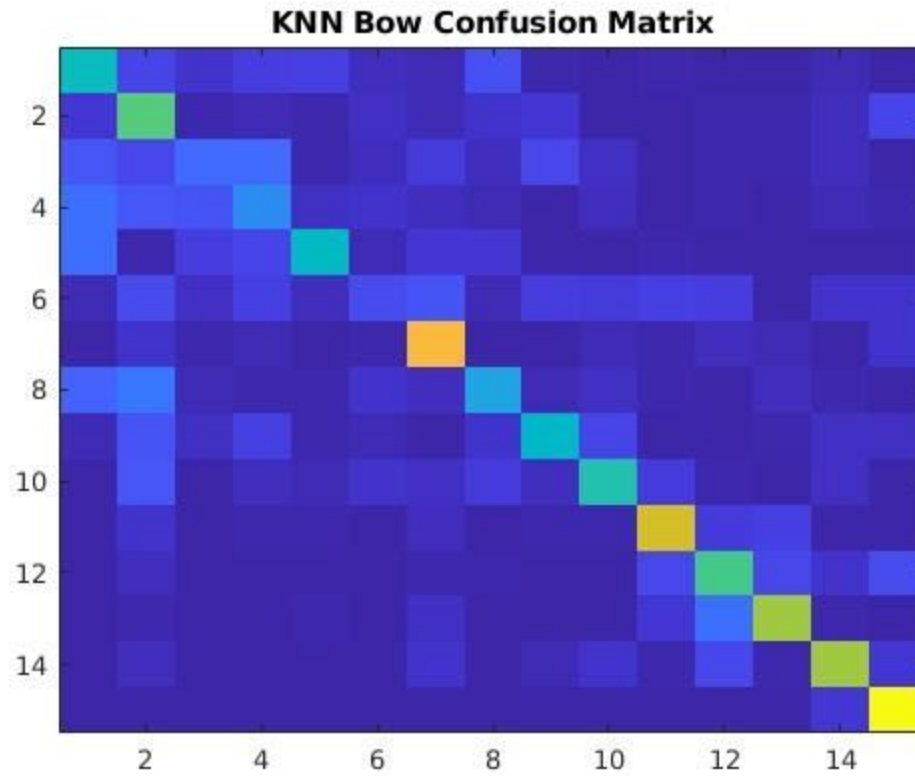

KNN Tiny Confusion Matrix
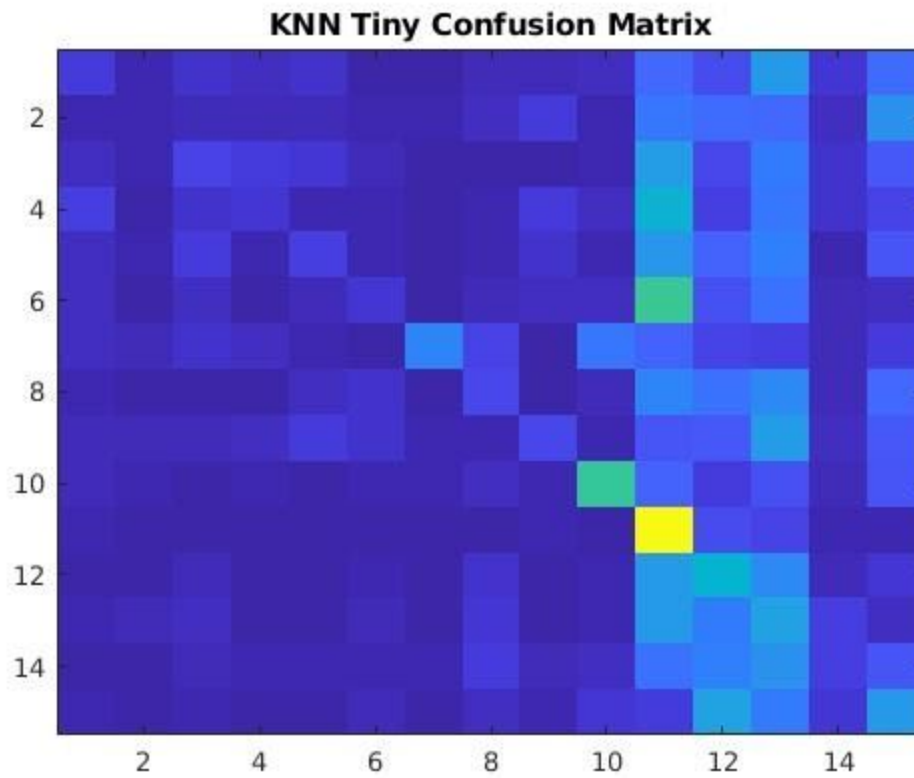
Tiny Image Size: (16x16)
K = 5 (for KNN)
Accuracy: 19.4667%

Problem 2 (KNN with BoW)

KNN Bow Confusion Matrix

Dict_size = 50
SIFT Feature Dimension: 128
K = 7 (for KNN)
Accuracy: 51.4%

Extra Credit (SVM with BoW)

SVM Bow Confusion Matrix
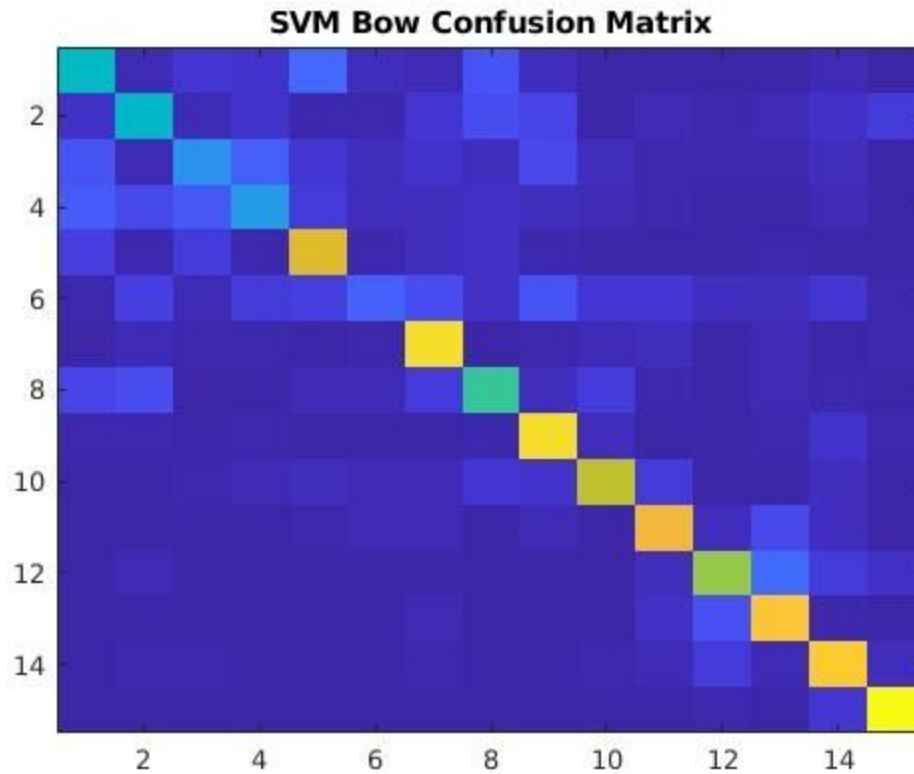
Dict_size = 50
SIFT Feature Dimension = 128
Accuracy: 62%

Out of the three model combinations, SVM with Bag of Words (BoW) performed the best because BoW is a better representation of an image than the Tiny Image and SVM is a better classifier than KNN.