

Here, we are comparing several machine learning techniques which are Support Vector Machine, K Nearest Neighbors, Decision Tree, Naïve Bayes.

1. For each of the following case, to run the project open the "Main.py" python file and click Run.

- If you want to run the SVM, uncomment the following code segment (line 45 & 46) in "SVM\_classification.py" prior to run the Main.py.

```
classifier = Pipeline( [('vec', vec),  
                        ('cls', svm.SVC(kernel='linear', C=2.0))] )
```

- If you want to run the KNN, uncomment the following code segment (line 43 & 44) in "SVM\_classification.py" prior to run the Main.py.

```
classifier = Pipeline([('vec', vec),  
                       ('cls', KNeighborsClassifier(n_neighbors=15))])
```

- If you want to run the Decision Tree, uncomment the following code segment (line 39 & 40) in "SVM\_classification.py" prior to run the Main.py.

```
classifier = Pipeline( [('vec', vec),  
                        ('cls', DecisionTreeClassifier(max_depth=110))] )
```

- If you want to run the Naïve Bayes, uncomment the following code segment (line 41 & 42) in "SVM\_classification.py" prior to run the Main.py.

```
classifier = Pipeline( [('vec', vec),  
                        ('cls', MultinomialNB())] )
```