

Language Recognition

```
In [13]: %store -r accuracy_df
accuracy_df
```

		Training Data Accuracy	Test Data Accuracy
Count Vectorizer	Logistic Regression	0.993295	0.939773
	Naive Bayes	0.991023	0.959318
Tf-idf	Logistic Regression	0.974034	0.941364
	Naive Bayes	0.983920	0.939545

First Sentence Prediction

```
In [14]: %store -r accuracy_f1
accuracy_f1
```

		Training Data	Test Data
Count Vectorizer	Accuracy	0.673437	0.533291
	F1 Score	0.645661	0.443936
Tf-idf	Accuracy	0.695176	0.592190
	F1 Score	0.684098	0.547264

```
In [15]: %store -r tf_optimized
tf_optimized
```

		Training Data	Test Data
Un-optimized	Accuracy	0.695176	0.592190
	F1 Score	0.684098	0.547264
Optimized	Accuracy	0.696604	0.580026
	F1 Score	0.688193	0.528058