Prediction result

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3115
Total predict not hate label : 82
Wrong prediction: 171
Correct prediction: 3026
```

Result KNN preprocessing bag of words

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3132
Total predict not hate label : 65
Wrong prediction: 164
Correct prediction: 3033
```

Prediction result

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3124
Total predict not hate label : 73
Wrong prediction: 158
Correct prediction: 3039
```

```
Support label 0 : 5937
Support label 1 : 456
Total predict hate label : 5199
Total predict not hate label : 1194
Wrong prediction: 840
Correct prediction: 5553
```

Prediction result

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3168
Total predict not hate label : 29
Wrong prediction: 184
Correct prediction: 3013
```

```
Support label 0 : 5937
Support label 1 : 456
Total predict hate label : 5199
Total predict not hate label : 1194
Wrong prediction: 840
Correct prediction: 5553
```

Prediction result

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3098
Total predict not hate label : 99
Wrong prediction: 125
Correct prediction: 0
```

```
Support label 0 : 2984
Support label 1 : 213
Total predict hate label : 3073
Total predict not hate label : 124
Wrong prediction: 125
Correct prediction: 3072
```

machine learning evaluation comparison

Result K neasrest Neighbor

	accuracy	precision	recall	f1
KNN Smote Embed layer encoder	86.860629	0.943756	0.868606	0.893637
KNN Bag Of Words	94.651236	0.938505	0.946512	0.935211
KNN preprocessing Bag Of Words	94.870191	0.945310	0.948702	0.935668
KNN TFIDF Preprocessing	95.057867	0.947268	0.950579	0.939049

Result Naives Bayes

	accuracy	precision	recall	f1
Naives bayes Bag Of Words	95.620895	0.952988	0.956209	0.948619
Naives bayes Preprocessing Bag Of Words	96.090084	0.957829	0.960901	0.956025
Naives bayes Preprocessing TFIDF	94.244604	0.945789	0.942446	0.921427
Naives Bayes Smote Embed Layer	88.800250	0.932142	0.888003	0.904432