

Financial Market News - Sentiment Analysis

✓ Import Library

```
import pandas as pd
```

```
import numpy as np
```

✓ Import Dataset

```
df = Pd.read_csv(r'https://github.com/YBI-Foundation/Dataset/raw/main/Financial%20
```

```
df.head()
```

```
df.shape
```

```
df.columns
```

✓ Get Feature Selection

```
' '.join(str(x) for x in df.iloc[1,2;27])
```

```
df.index
```

```
len(df.index)
```

```
news = []
```

```
type(news)
```

```
news[0]
```

```
x = news
```

```
type(x)
```

✓ Get Feature Text Conversion Bag Words

```
from sklearn.feature_extraction.text import CountVectorizer
```

```
cv = CountVectorizer(lowercase = True, ngram_range=(1,1))
```

```
x.shape
```

```
y = df['Label']
```

```
y.shape
```

✓ Get Train Test Split

```
from sklearn.model_selection import train_test_split
```

```
x_train, x_test, y_train, y_test = train_test_split(X,y,test_size = 0.3, stratify = y, random_
```

```
from sklearn.ensemble import RandomForestClassifier
```

```
rf = RandomForestClassifier(n_estimators=200)
```

```
rf.fit(X_train, y_train)
```

```
y_pred = rf.predict(x_test)
```

```
from sklearn.metrics import classification_report,confusion_matrix,accuracy_score
```

```
confusion_matrix(y_test,y_pred)
```

```
print(classification_report(y_test, y_pred))
```

