

```
import pandas as pd from sklearn.model
selection import train_test split
from sklearn.feature_extraction.text import
TfidfVectorizer
from sklearn.naive bayes import
MultinomialNB from sklearn.metrics
import accuracy score classification.report
# Load dataset
df= pdread_csv('dataset.csv) df['text'] =
df['text'].astype(str) df['label'] =
df['label'].astype(int)
# Split data
X_train, X_test, y_train, y_test = train_test
split(df['text'], df['label'], test_size=0.2
random_state=42]
# TF-IDF
tfidf = TfidfVectorizer(stop_
words='english' X_train_tfidf=
tfidf.fit_transform(X_train) X_test_tfidf=
tfidf.transform(X_test
# Train and Evaluate model =
```

```
MultinomialNB(  
model.fit(X_train_tfidf,y_train) y_pred =  
model.predict(X_test_tfidf)  
print(Accuracy:', accuracy_score(y_test,  
y_pred) print(classification_report(y_test,  
y_pred))
```