```
import pandas as pd
 from sklearn.model_selection import
 train_test_split
from sklearn.feature_extraction.text
import CountVectorizer
 from sklearn.naive_bayes import
MultinomialNB
from sklearn.metrics import
 accuracy_score
```

Step 1: Load a small dataset

```
data = pd.DataFrame({
 'text': [
 'The sky is green and the grass is
 blue',
 'NASA confirms Earth is round',
   'Aliens have landed on Mars
yesterday',
'Scientists discover cure for common
 cold',
 'Click here to win $1 million instantly',
 'Government launches new
```

```
 healthcare plan',

],

 'label': [0, 1, 0, 1, 0, 1] # 0 = fake, 1 =

 Real

})
```

Step 2: Prepare data

```
X_train, X_test, y_train, y_test =

 train_test_split(data['text'], data['label'],

 test_size=0.3, random_state=42)
```

Step 3: Convert text to features

```
vectorizer = CountVectorizer()

 X_train_counts =

 vectorizer.fit_transform(X_train)

X_test_counts =

 vectorizer.transform(X_test)
```

Step 4: Train model

```
model = MultinomialNB()

 model.fit(X_train_counts, y_train)
```

Step 5: Predict

```
y_pred = model.predict(X_test_counts)
 print("Accuracy:", accuracy_score(y_test,
 y_pred))
```

Optional: Predict a new article

```
def predict_news(news):
news_vec =
 vectorizer.transform([news])
 result = model.predict(news_vec)
 return "Real News" if result[0] == 1 else
 "Fake News"
```

Example

```
print(predict_news("Scientists reveal new
 vaccine for virus"))
```