In [16]:
```
import pandas as pd
from sklearn.feature_extraction.text import CountVectorizer
from sklearn.model_selection import train_test_split
from sklearn.naive_bayes import MultinomialNB
```

In [17]:
```
data = pd.read_csv('data.csv')
```

In [23]:
```
x = data['Body']
y = data['Label']
X_train, X_test, y_train, y_test = train_test_split(x,y,test_size=0.2,
                                                    random_state=42)
```

In [26]:
```
vectorizer = CountVectorizer()
```

In [27]:
```
X_train = vectorizer.fit_transform(X_train)
X_test = vectorizer.transform(X_test)
```

In [37]:
```
classifier = MultinomialNB()
```

In [38]:
```
classifier.fit(X_train, y_train)
```

Out[38]:
```
▾ MultinomialNB
MultinomialNB()
```

In [39]:
```
accuracy = classifier.score(X_test, y_test)
```

In [33]:
```
print(f"Accuracy: {accuracy}")
```

```
Accuracy: 0.9865
```

In [34]:
```
new_emails = [
    "Get rich quick! Guaranteed income!",
    "Hey, let's meet for lunch today."
]
```

In [35]:
```
new_emails_transformed = vectorizer.transform(new_emails)
```

In [36]:
```
predictions = classifier.predict(new_emails_transformed)
print("Predictions:")
for email, prediction in zip(new_emails, predictions):
    print(f"Email: {email}")
    print(f"Prediction: {'spam' if prediction == 1 else 'not spam'}")
    print()
```

```
Predictions:
Email: Get rich quick! Guaranteed income!
Prediction: spam

Email: Hey, let's meet for lunch today.
Prediction: not spam
```

In [ ]: