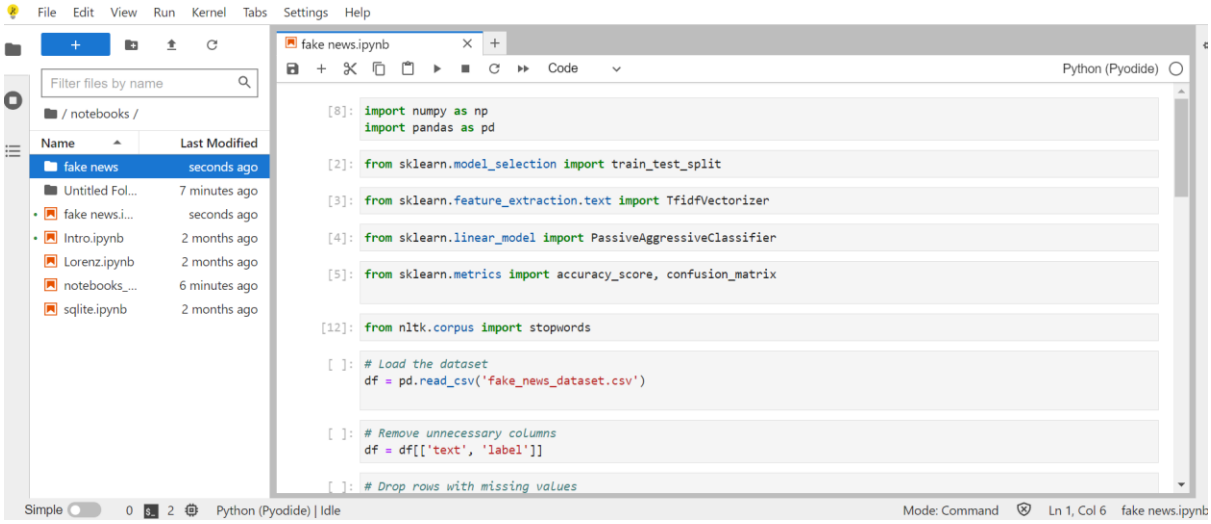
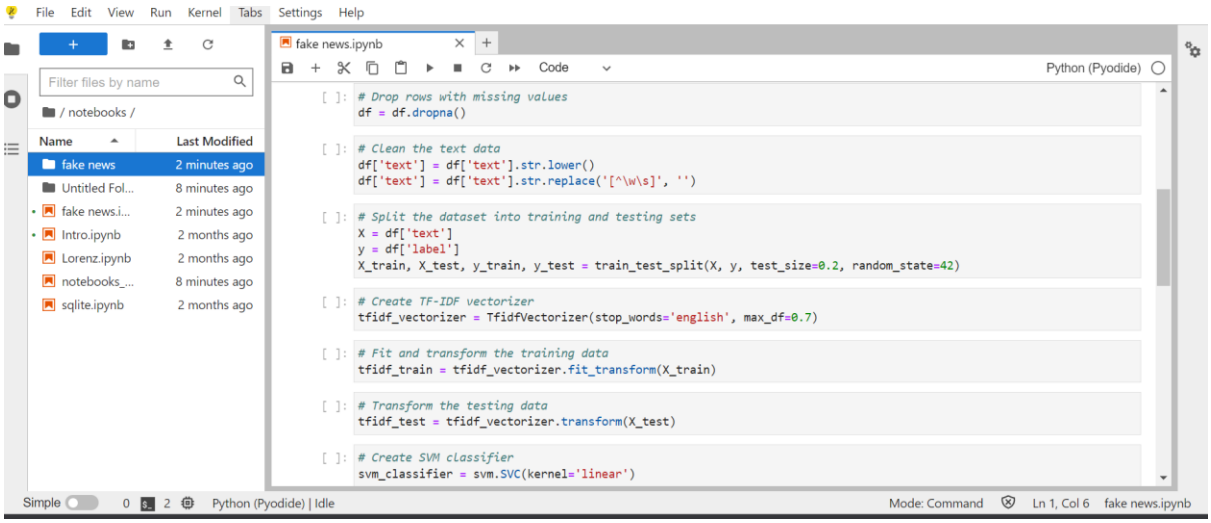
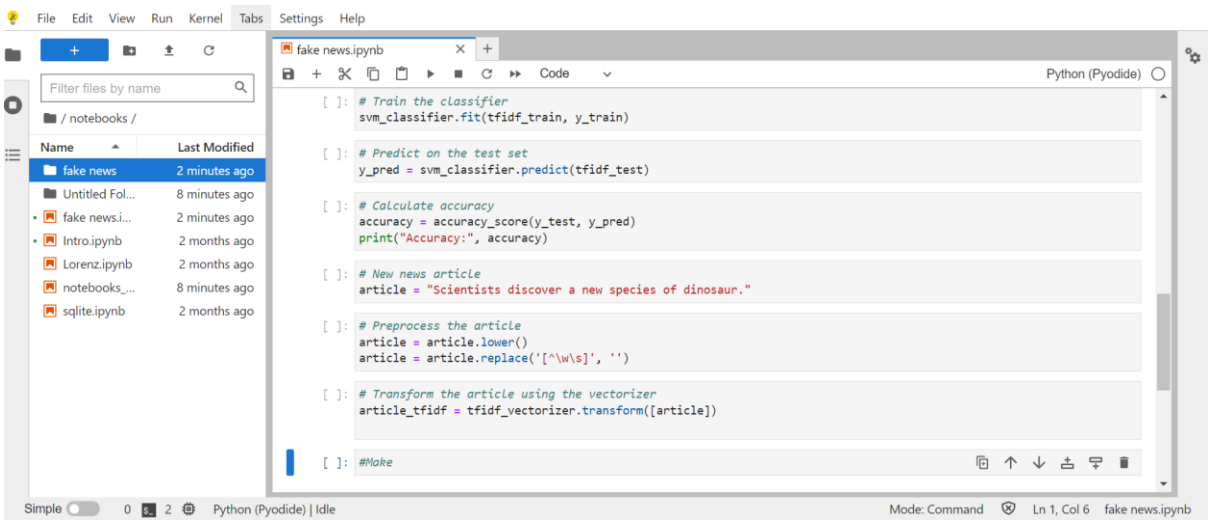

File Edit View Run Kernel Tabs Settings Help
fake news.ipynb
Code
Python (Pyodide)
Filter files by name
/ notebooks /
Name
Last Modified
fake news seconds ago
Untitled Fol... 7 minutes ago
fake news.i... seconds ago
Intro.ipynb 2 months ago
Lorenz.ipynb 2 months ago
notebooks_... 6 minutes ago
sqlite.ipynb 2 months ago
[8]: import numpy as np
import pandas as pd
[2]: from sklearn.model_selection import train_test_split
[3]: from sklearn.feature_extraction.text import TfidfVectorizer
[4]: from sklearn.linear_model import PassiveAggressiveClassifier
[5]: from sklearn.metrics import accuracy_score, confusion_matrix
[12]: from nltk.corpus import stopwords
[ ]: # Load the dataset
df = pd.read_csv('fake_news_dataset.csv')
[ ]: # Remove unnecessary columns
df = df[['text', 'label']]
[ ]: # Drop rows with missing values
Simple 0 2 Python (Pyodide) | Idle
Mode: Command Ln 1, Col 6 fake news.ipynb


File Edit View Run Kernel Tabs Settings Help
fake news.ipynb
Code
Python (Pyodide)
Filter files by name
/ notebooks /
Name
Last Modified
fake news 2 minutes ago
Untitled Fol... 8 minutes ago
fake news.i... 2 minutes ago
Intro.ipynb 2 months ago
Lorenz.ipynb 2 months ago
notebooks_... 8 minutes ago
sqlite.ipynb 2 months ago
[ ]: # Drop rows with missing values
df = df.dropna()
[ ]: # Clean the text data
df['text'] = df['text'].str.lower()
df['text'] = df['text'].str.replace('[^\w\s]', '')
[ ]: # Split the dataset into training and testing sets
X = df['text']
y = df['label']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
[ ]: # Create TF-IDF vectorizer
tfidf_vectorizer = TfidfVectorizer(stop_words='english', max_df=0.7)
[ ]: # Fit and transform the training data
tfidf_train = tfidf_vectorizer.fit_transform(X_train)
[ ]: # Transform the testing data
tfidf_test = tfidf_vectorizer.transform(X_test)
[ ]: # Create SVM classifier
svm_classifier = svm.SVC(kernel='linear')
Simple 0 2 Python (Pyodide) | Idle
Mode: Command Ln 1, Col 6 fake news.ipynb


File Edit View Run Kernel Tabs Settings Help
fake news.ipynb
Code
Python (Pyodide)
Filter files by name
/ notebooks /
Name
Last Modified
fake news 2 minutes ago
Untitled Fol... 8 minutes ago
fake news.i... 2 minutes ago
Intro.ipynb 2 months ago
Lorenz.ipynb 2 months ago
notebooks_... 8 minutes ago
sqlite.ipynb 2 months ago
[ ]: # Train the classifier
svm_classifier.fit(tfidf_train, y_train)
[ ]: # Predict on the test set
y_pred = svm_classifier.predict(tfidf_test)
[ ]: # Calculate accuracy
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
[ ]: # New news article
article = "Scientists discover a new species of dinosaur."
[ ]: # Preprocess the article
article = article.lower()
article = article.replace('[^\w\s]', '')
[ ]: # Transform the article using the vectorizer
article_tfidf = tfidf_vectorizer.transform([article])
[ ]: #Make
Simple 0 2 Python (Pyodide) | Idle
Mode: Command Ln 1, Col 6 fake news.ipynb