Source Code:

from sklearn.feature\_extraction.text import TfidfVectorizer

from sklearn.linear\_model import LogisticRegression

from sklearn.model\_selection import train\_test\_split

from sklearn.metrics import classification\_report

# Load and preprocess data

df = pd.read\_csv("social\_media\_sentiment.csv")

X = df['text']

y = df['sentiment']

# TF-IDF Vectorization

vectorizer = TfidfVectorizer(max\_features=5000)

X\_vec = vectorizer.fit\_transform(X)

# Split and train

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X\_vec, y, test\_size=0.2)

model = LogisticRegression()

model.fit(X\_train, y\_train)

# Evaluation

y\_pred = model.predict(X\_test)

print(classification\_report(y\_test, y\_pred))