# to read and manipulate the data

import pandas as pd

import numpy as np

pd.set\_option('max\_colwidth', None)    # setting column to the maximum column width as per the data

# to visualise data

import matplotlib.pyplot as plt

import seaborn as sns

# to use regular expressions for manipulating text data

import re

# to load the natural language toolkit

import nltk

nltk.download('stopwords')    # loading the stopwords

nltk.download('wordnet')    # loading the wordnet module that is used in stemming

# to remove common stop words

from nltk.corpus import stopwords

# to perform stemming

from nltk.stem.porter import PorterStemmer

# to create Bag of Words

from sklearn.feature\_extraction.text import CountVectorizer

# to split data into train and test sets

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

# to build a Random Forest model

from sklearn.ensemble import RandomForestClassifier

# to compute metrics to evaluate the model

from sklearn import metrics

from sklearn.metrics import accuracy\_score, classification\_report, confusion\_matrix

# To tune different models

from sklearn.model\_selection import GridSearchCV