#To import the libraries

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

from sklearn.tree import DecisionTreeClassifier

import numpy as np

import pandas as pd

#To load the data

path= "/content/drive/MyDrive/stock python/1613615-Stock\_Price\_data\_set.xlsx"

#Store the data into variable

df = pd.read\_excel(path)

#set the date as the index for the data

df = df.set\_index(pd.DatetimeIndex(df['Date'].values))

#Give the index a name

df.index.name = 'Date'

#show the data

df

#manipulate the data

#create the target column

df['Price\_Up'] = np.where(df['Close'].shift(-1) > df['Close'], 1,0)

#remove the date column

df = df.drop(columns=['Date'])

#show the data

Df

#split the data set into a feature and a target data set

X = df.iloc[:, 0:df.shape[1]-1].values

Y = df.iloc[:,df.shape[1]-1].values

#split the data again but this time into 80% training and 20% testing data set

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

# Create and train the model (DecisionTreeClassifier)

tree= DecisionTreeClassifier().fit(X\_train, Y\_train)

#show how well the model did on the test data set

print(tree.score(X\_test, Y\_test))

#show the model predictions

tree\_predictions= tree.predict(X\_test)

print(tree\_predictions)