import pandas as pd

from sklearn import tree

from sklearn.preprocessing import LabelEncoder

from sklearn.naive\_bayes import GaussianNB

data = pd.read\_csv('tennisdata.csv')

print("The first 5 values of data is :\n",data.head())

X = data.iloc[:,:-1]

print("\nThe First 5 values of train data is\n",X.head())

y = data.iloc[:,-1]

print("\nThe first 5 values of Train output is\n",y.head())

le\_outlook = LabelEncoder()

X.Outlook = le\_outlook.fit\_transform(X.Outlook)

le\_Temperature = LabelEncoder()

X.Temperature = le\_Temperature.fit\_transform(X.Temperature)

le\_Humidity = LabelEncoder()

X.Humidity = le\_Humidity.fit\_transform(X.Humidity)

le\_Windy = LabelEncoder()

X.Windy = le\_Windy.fit\_transform(X.Windy)

print("\nNow the Train data is :\n",X.head())

le\_PlayTennis = LabelEncoder()

y = le\_PlayTennis.fit\_transform(y)

print("\nNow the Train output is\n",y)

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

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X,y, test\_size=0.20)

classifier = GaussianNB()

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

from sklearn.metrics import accuracy\_score

print("Accuracy is:",accuracy\_score(classifier.predict(X\_test),y\_test))