

```
import pandas as pd

from sklearn.metrics import confusion_matrix, classification_report, accuracy_score
from sklearn.preprocessing import LabelEncoder
from sklearn.model_selection import train_test_split
from sklearn.naive_bayes import GaussianNB

df = pd.read_csv('Datasets/Iris.csv')

df

df.isnull().sum()

label_encoder = LabelEncoder()
df['Species'] = label_encoder.fit_transform(df['Species'])
df

x = df.drop('Species', axis=1)
x

y = df.Species
y

x_train, x_test, y_train, y_test = train_test_split(x, y, test_size=0.2, random_state=0)
gaussian = GaussianNB()
gaussian.fit(x_train, y_train)

y_pred = gaussian.predict(x_test)

matrix = confusion_matrix(y_test, y_pred)
matrix

print(classification_report(y_test, y_pred))

accuracy = accuracy_score(y_test, y_pred)
accuracy
```