

```
import pandas as pd
import seaborn as sns
import numpy as np
from sklearn.datasets import load_iris
# load iris flower data from scikit-learn

iris = load_iris()
```

```
df = pd.DataFrame(data=iris.data, columns=iris.feature_names)
df['target'] = iris.target
df
```

```
df.columns=['sl','sw','pl','pw','label']
df
```

```
from sklearn.model_selection import train_test_split
train,test=train_test_split(df,test_size=0.2)
```

```
from sklearn.neighbors import KNeighborsClassifier
```

```
knn = KNeighborsClassifier(n_neighbors=5)
```

```
x_train=train[['pl','pw']]
y_train=train[['label']]
```

```
knn.fit(x_train,y_train.values.ravel())
```

```
x_test=test[['pl','pw']]
y_test=test[['label']]
```

```
predictions=knn.predict(x_test)
predictions
```

```
comparison = pd.DataFrame(
    {'pred':predictions, 'truth':y_test.values.ravel()})
comparison
```

