```
import numpy as np
import pandas as pd

dataset = pd.read_csv("iris.csv")
X = dataset.iloc[:, :-1].values
y = dataset.iloc[:, 4].values

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)
from sklearn.neighbors import KNeighborsClassifier
classifier = KNeighborsClassifier(n_neighbors=5)
classifier.fit(X_train, y_train)
y_pred = classifier.predict(X_test)
from sklearn.metrics import classification_report
print(classification_report(y_test, y_pred))

from sklearn.metrics import accuracy_score
print ("Accuracy : ", accuracy_score(y_test, y_pred))

df = pd.DataFrame({'Real Values':y_test, 'Predicted Values':y_pred})
print(df)

new_test_point = np.array([[5.1, 3.5, 1.4, 0.2]])
prediction = classifier.predict(new_test_point)
print(f"\n Predicted class: {prediction[0]}")
```

output

```
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```

C:\Users\mlm\PycharmProjects\BIBIN\venv\Scripts\python.exe
C:\Users\mlm\PycharmProjects\BIBIN\venv\knn.py

	precision	recall	f1-score	support
Setosa	1.00	1.00	1.00	10
Versicolor	1.00	1.00	1.00	10
Virginica	1.00	1.00	1.00	10
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30

Accuracy : 1.0

	Real Values	Predicted Values
0	Setosa	Setosa
1	Versicolor	Versicolor
2	Versicolor	Versicolor
3	Versicolor	Versicolor
4	Setosa	Setosa
5	Virginica	Virginica
6	Virginica	Virginica
7	Setosa	Setosa
8	Setosa	Setosa
9	Versicolor	Versicolor
10	Setosa	Setosa
11	Virginica	Virginica
12	Setosa	Setosa
13	Virginica	Virginica
14	Setosa	Setosa
15	Versicolor	Versicolor
16	Virginica	Virginica

17 Setosa Setosa

18 Versicolor Versicolor

19 Virginica Virginica

20 Versicolor Versicolor

21 Virginica Virginica

22 Versicolor Versicolor

23 Versicolor Versicolor

24 Virginica Virginica

25 Versicolor Versicolor

26 Virginica Virginica

27 Virginica Virginica

28 Setosa Setosa

29 Setosa Setosa

Predicted class: Setosa

Process finished with exit code 0