Step 1: Importing the Libraries

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

Step 2: Importing the dataset

```
df = pd.read_csv("Iris.csv")
df.head()
```

	sepal_length	sepal_width	petal_length	petal_width	species	1
0	5.1	3.5	1.4	0.2	Iris-setosa	
1	4.9	3.0	1.4	0.2	Iris-setosa	
2	4.7	3.2	1.3	0.2	Iris-setosa	
3	4.6	3.1	1.5	0.2	Iris-setosa	
4	5.0	3.6	1.4	0.2	Iris-setosa	

Step 3: Checking for null values

```
df.isnull().sum()

sepal_length 0
sepal_width 0
petal_length 0
petal_width 0
species 0
dtype: int64
```

Saved successfully!

Step 4: Splitting the dataset into the Training set and Test set

```
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x, y, test_size = 0.2)
```

Step 5: Feature Scaling

```
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
x_train = sc.fit_transform(x_train)
x_test = sc.transform(x_test)
```

Step 6: Training the Naive Bayes Classification model on the Training Set

Step 7: Predicting the Test set results

```
y_pred = classifier.predict(x_test)
y_pred

C> array(['Iris-virginica', 'Iris-virginica', 'Iris-setosa', 'Iris-setosa', 'Iris-setosa', 'Iris-versicolor', 'Iris-virginica', 'Iris-versicolor', 'Iris-virginica', 'Iris-setosa', 'Iris-virginica', 'Iris-setosa', 'Iris-versicolor', 'Iris-versicolor', 'Iris-virginica', 'Iris-virginica', 'Iris-virginica', 'Iris-virginica', 'Iris-virginica', 'Iris-versicolor', 'Ir
```

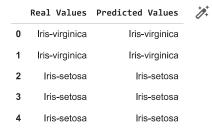
```
'Iris-versicolor', 'Iris-versicolor', 'Iris-setosa', 'Iris-setosa', 'Iris-versicolor'], dtype='<U15')

+ Code + Text
```

Step 8: Confusion Matrix and Accuracy

Step 9: Comparing the Real Values with Predicted Values

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



Saved successfully!