```
[283]: import numpy as np
                                                                     import matplotlib.pyplot as plt
                                                                    import pandas as pd
 [284]: dataset = pd.read_csv("IRIS.csv")
   [285]: dataset.head()
 [285]:
                                                                                             sepal_length sepal_width petal_length petal_width
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     species
                                                                  0
                                                                                                                                                                             5.1
                                                                                                                                                                                                                                                                                     3.5
                                                                                                                                                                                                                                                                                                                                                                                                     1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.2 Iris-setosa
                                                                    1
                                                                                                                                                                          4.9
                                                                                                                                                                                                                                                                                     3.0
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                                                                    2
                                                                                                                                                                          4.7
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                                                                                                                                                                                                                                                                                                                                                                                                     1.3
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                                                                                                                                                                          4.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.2 Iris-setosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.2 Iris-setosa
 [286]: X = dataset.iloc[:, :-1].values
                                                                     y = dataset.iloc[:, 4].values
[286]: array(['Iris-setosa', 'Iris-setosa', 'Iris-s
                                                                                                                                    'Iris-setosa', 'Iris-
                                                                                                                                  'Iris-setosa', 'Iris-
                                                                                                                                      'Iris-versicolor', 'Iris-versico
                                                                                                                                        'Iris-versicolor', 'Iris-versicolor', 'Iris-versicolor',
 [287]: 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
                                                                     from sklearn.preprocessing import StandardScaler
                                                                     scaler = StandardScaler()
                                                                     scaler.fit(X_train)
                                                                     X_train = scaler.transform(X_train)
                                                                    X_test = scaler.transform(X_test)
```

```
[288]: from sklearn.neighbors import KNeighborsClassifier
    classifier = KNeighborsClassifier(n_neighbors=5)
    classifier.fit(X_train, y_train)

[288]: v KNeighborsClassifier  
KNeighborsClassifier()

[289]: y_pred = classifier.predict(X_test)

[290]: from sklearn.metrics import classification_report, confusion_matrix
    print(confusion_matrix(y_test, y_pred))

[[6 0 0]
    [0 12 0]
    [0 0 12]]
```