```
#Loading required modules

from sklearn import datasets
from sklearn.neighbors import KNeighborsClassifier

#Loading Dataset
iris = datasets.load_iris()
```

```
# Printing  description and features
print(iris.DESCR)
```

```
        :Attribute Information:
            - sepal length in cm
            - sepal width in cm
            - petal length in cm
            - petal width in cm
            - class:
                    - Iris-Setosa
                    - Iris-Versicolour
                    - Iris-Virginica

        :Summary Statistics:

        ============== ==== ==== ======= ===== ====================
                        Min  Max   Mean    SD   Class Correlation
        ============== ==== ==== ======= ===== ====================
        sepal length:   4.3  7.9   5.84   0.83    0.7826
        sepal width:    2.0  4.4   3.05   0.43   -0.4194
        petal length:   1.0  6.9   3.76   1.76    0.9490  (high!)
        petal width:    0.1  2.5   1.20   0.76    0.9565  (high!)
        ============== ==== ==== ======= ===== ====================

        :Missing Attribute Values: None
        :Class Distribution: 33.3% for each of 3 classes.
        :Creator: R.A. Fisher
        :Donor: Michael Marshall (MARSHALL%PLU@io.arc.nasa.gov)
        :Date: July, 1988

    The famous Iris database, first used by Sir R.A. Fisher. The dataset is taken
    from Fisher's paper. Note that it's the same as in R, but not as in the UCI
    Machine Learning Repository, which has two wrong data points.

    This is perhaps the best known database to be found in the
```

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    - Fisher, R.A. "The use of multiple measurements in taxonomic problems"
      Annual Eugenics, 7, Part II, 179-188 (1936); also in "Contributions to
      Mathematical Statistics" (John Wiley, NY, 1950).
    - Duda, R.O., & Hart, P.E. (1973) Pattern Classification and Scene Analysis.
      (Q327.D83) John Wiley & Sons.  ISBN 0-471-22361-1.  See page 218.
    - Dasarathy, B.V. (1980) "Nosing Around the Neighborhood: A New System
      Structure and Classification Rule for Recognition in Partially Exposed
      Environments".  IEEE Transactions on Pattern Analysis and Machine
      Intelligence, Vol. PAMI-2, No. 1, 67-71.
    - Gates, G.W. (1972) "The Reduced Nearest Neighbor Rule".  IEEE Transactions
      on Information Theory, May 1972, 431-433.
    - See also: 1988 MLC Proceedings, 54-64.  Cheeseman et al"s AUTOCLASS II
      conceptual clustering system finds 3 classes in the data.
    - Many, many more ...

    |details-end|
```

```
features = iris.data
labels = iris.target
print(features[0],labels[0])
```

```
[5.1 3.5 1.4 0.2] 0
```

```
# Training the classifier
clf = KNeighborsClassifier()
clf.fit(features,labels)
```

```
KNeighborsClassifier
KNeighborsClassifier()
```

```
preds = clf.predict([[5.1,9.5,6.4,0.2]])
print(preds)
```

```
[2]
```

```
Start coding or generate with AI.
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