





```
import pandas as pd
from sklearn.preprocessing import LabelEncoder
```

```
column_names = ['sepal.length', 'sepal.width', 'petal.length', 'petal.width', 'Species']
df = pd.read_csv('Iris.csv', header=None, names=column_names)
df
```



	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	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
...
145	6.7	3.0	5.2	2.3	Iris-virginica
146	6.3	2.5	5.0	1.9	Iris-virginica
147	6.5	3.0	5.2	2.0	Iris-virginica
148	6.2	3.4	5.4	2.3	Iris-virginica
149	5.9	3.0	5.1	1.8	Iris-virginica






150 rows × 5 columns

Next steps: [Generate code with df](#) [View recommended plots](#) [New interactive sheet](#)

✓ Perform label encoding on 'Species' column

```
label_encoder = LabelEncoder()
df['Species_encoded'] = label_encoder.fit_transform(df['Species'])
print("\nLabel encoded values:\n", df[['Species', 'Species_encoded']].drop_duplicates())
```



```
Label encoded values:
      Species  Species_encoded
0    Iris-setosa              0
50  Iris-versicolor          1
100  Iris-virginica          2
```

Label encoding is a technique used to convert categorical variables into numerical values so that machine learning models can process them efficiently. It is particularly useful when dealing with classification tasks where categorical data is present. How It Works Label

encoding assigns unique numeric values to each distinct category in a column. For example, if we have a dataset with a column "Fruit" containing values: Apple, Banana, Orange, Apple, Orange

After applying label encoding, the column would be transformed into:

Apple -> 0

Banana -> 1

Orange -> 2

Start coding or generate with AI.