```
In [2]:  import pandas as pd

         #표준화
         from sklearn.preprocessing import StandardScaler

         #정규화
         from sklearn.preprocessing import MinMaxScaler
         from sklearn.preprocessing import MaxAbsScaler

         #로버스트
         from sklearn.preprocessing import RobustScaler

         #레이블 인코딩
         from sklearn.preprocessing import LabelEncoder
```

```
In [4]:  df = pd.read_csv("IRIS.csv")
         df.head()
```

Out[4]:

	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

In [ ]:

레이블 인코딩

```
In [1]:  #labelencoder
```

```
In [2]:  # 데이터 개수
```

표준화

```
In [9]:  # 데이터 컬럼
         columns = ['sepal_length','sepal_width','petal_length','petal_width','species']
```

```
In [3]:  #StandardScaler
```

In [ ]:

정규화

```
In [4]:  #MinMaxScaler
```

```
In [5]:  #MaxAbsScaler
```

로버스트

```
In [6]:  # RobustScaler
```

```
In [7]:  #StandardScaler 비교
```

In [ ]:

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js