logistic regression

# library link

https://github.com/scikit-learn/scikit-learn/blob/main/sklearn/linear\_model/\_base.py

# basic description

The purpose of logistic regression is to express the relationship between the dependent variable and the independent variable as a specific function and use it for future prediction models, similar to the goal of general regression analysis. This is similar to linear regression analysis in terms of explaining the dependent variable by linear combination of independent variables. However, unlike linear regression, logistic regression can also be seen as a kind of classification technique because the dependent variable targets categorical data and the results of the data are divided into specific classifications when input data is given.

<https://en.wikipedia.org/wiki/Logistic_regression>

# version

* NumPy >= 1.14.6 (pip install numpy)
* pandas >= 1.2.4 (pip install pandas)
* matplotlib == 3.22 (pip install matplotlib)
* sklearn == 1.0.2 (pip install sklearn)
* seaborn == 10.11.2 (pip install seaborn)

# dataset

* Use sklearn built-in data (see homepage below)

<https://scikit-learn.org/stable/install.html>

# code description

* It is a code that implements logistic regression with Wisconsin breast cancer patient data in sklearn.

# validation

* Verification through f1\_score.