### **EX.NO-13**

### LOGISTC REGRESSION

# Aim:

To implement model evaluation technique to get test score of a supervised learning algorithm

## **Description:**

- 1. Use of Logistic Regression model for model evaluation
- 2. The given build in data set, can be split into training set and test set
- 3. Evaluate the model through its test score

# Program:

```
from sklearn.linear_model import LogisticRegression from sklearn.model_selection import train_test_split from sklearn.datasets import make_blobs
```

```
# create a synthetic dataset
```

```
X, y = make_blobs(random_state=0)
```

# split data and labels into a training and a test set

```
X_train, X_test, y_train, y_test = train_test_split(X, y, random_state=0)
```

# instantiate a model and fit it to the training set

 $logreg = LogisticRegression().fit(X_train, y_train)$ 

# evaluate the model on the test set

print("Test set score: {:.2f}".format(logreg.score(X\_test, y\_test)))

# **Output:**

Test set score:0.88

## **Result:**

The programs were run successfully