#### **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