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