EXP NO: 10

AIM: To implement an artificial neural network for an application using classification.

PROCEDURE:

1. import MLPclassifier from neural_network.
2. Load the X and Y feature data sets as arrays.
3. Get test and train data.
4. fit model and predict

RESULT:

Thus an artificial neural network for classification has been implemented.

PROGRAM

```
from sklearn.neural_network import MLPClassifier
from matplotlib import pyplot as plt.

X_train = [[1,2], [2,3], [3,4]]
Y_train = [0, 1, 0]
X_test = [[1,3], [2,3] [2,4]]

m = MLPclassifier (max_iter = 1000)

m.fit (Xtrain, Y_train)

print(f" Train Score : {clf.score(X_train, Y_train)}")

predictions = clf.predict (x-test)

for i, point in enumerate(x-test):
        ptt.scatter (point[0], point[1], c='blue',
                                if predictions[i]== 0 else 'red'
plt.xlabel ("Feature 1")
plt.xlabel("F 2")
plt.show()
```