Ex.no: 10 Implementing artificial neural networks
Date: for an application using python
- classification

AIM:-
To implementing artificial neural networks for an application in classification using python

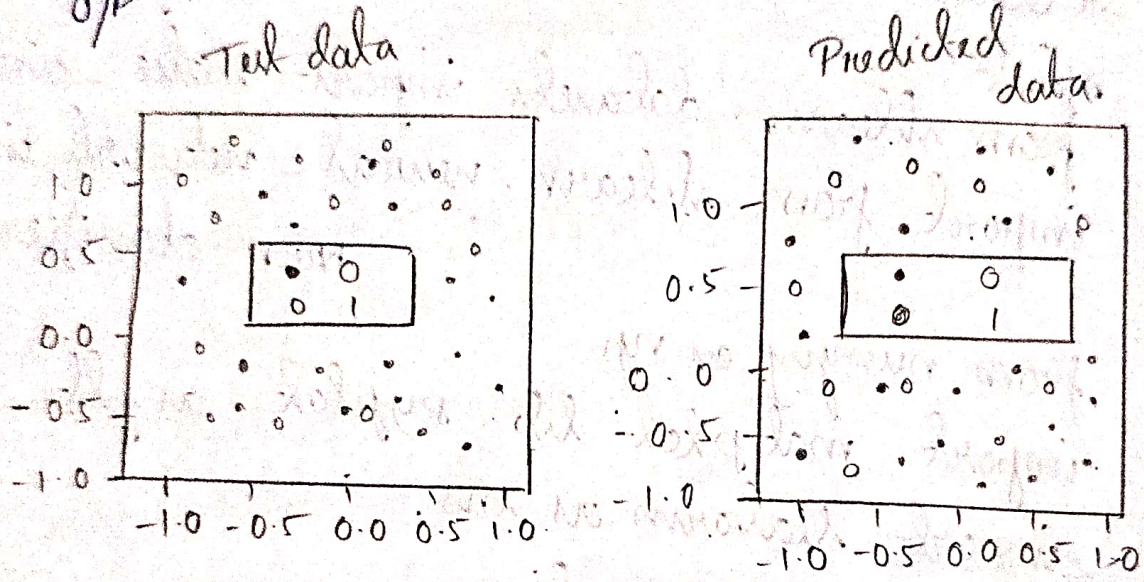
SOURCE CODE:-

```
sklearn.model_selection import train_test_split
from sklearn.datasets import make_circles
import from sklearn.neural_network import
                                    MLP classifier.

from numpy as np
import matplotlib.pyplot as plt
import seaborn as sns.
%matplotlib inline
X_train, y_train = make_circles(
                    n_samples = 300, noise =
                                    0.05)
x_test, y_test = make_circles (n_samples =
                    300, noise = 0.05).
sns.scatterplot (x_train [:0]
                x_train [:, 1, hue = y_train).
plt.title ("Train Data").
plt.show()
if = MLP classifier (max_iter = 1000)
if.fit (x_train, y_train).
```

```
y_pred = clf.predict(x_test)
fig, ax = plt.subplots(1,2)
ax[0].scatter(x_test[:,0], x_test[:,1], c=y_pred, cmap=cm_bright)
plt.show()
```

o/p :-



Result:

The program was successfully executed & the o/p is verified