

Ex.No.10

Implementing Artificial Neural Networks for an application using Python-classification

AIM:

To implement ANN for an application in classification.

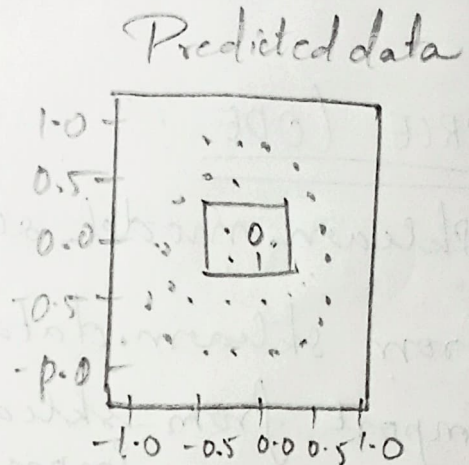
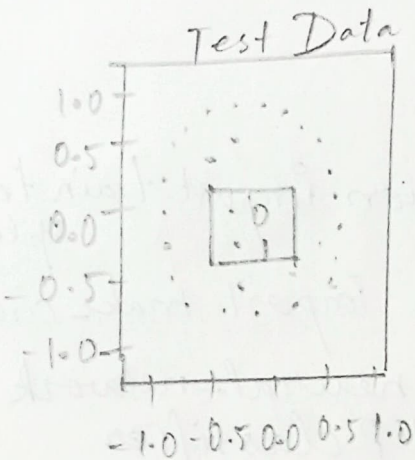
SOURCE CODE :

```
sklearn.model_selection import train_test_split
from sklearn.datasets import make_circles
import from sklearn.neural_network
import MLPClassifier

from numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
X_train, y_train = make_circles(n_samples=
                             100, 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()
```

```
plt.show()
sns.scatterplot(x=test[:,0],
                x=test[:,1], hue=y_pred, ax=ax[0])
plt.show()
```

Output :



RESULT:

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

