Ex no: 10 Implementing artificial neural networks for an application using Python - Classification

Date:

AIm:

To implementing artificial neural network for an application in classification using Python

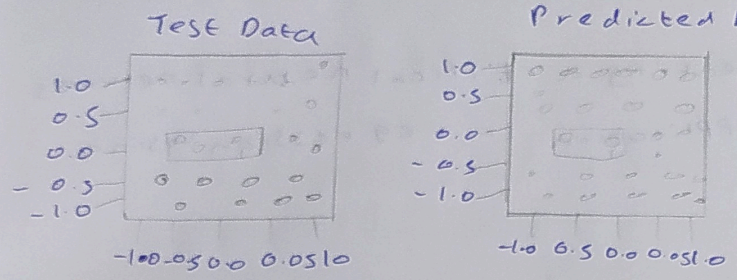
Program:

```
SKlearn.model_selection import train_test_split
from sklearn.dataset import make_circles
import from sklearn.neural_network
import MLClassifier
from numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
x_train, y_train = make_circle(n_samples=
                                100, noise = 0.05)
x_test, y_test = make_circle(n_samples=
                              300, noise = 0.05)
sns.scatterplot(x_train[:,0],
    x_train[:,1] hue = y_train)
lt.title("Train Data")
lt.show()
f.fit(x_train, y_train)
- Pred = if.Predict(x_test)
= fig, ax = plt.subplot(1,2)
s - Scatterplot(x_test[:,0],
```

19/11/2024 17:57

```
x_test[:,7], hue = y_Pred, ax = ax[0]
plt.show()
```

Output:



Result:

The Program was successfully executed and the output is verified.