Exp. No: 11 Implementing Artificial Neural Networks
Date: for an application using python - Regression.

Aim:

To implementing artificial neural networks for an applica
in Regression using Python

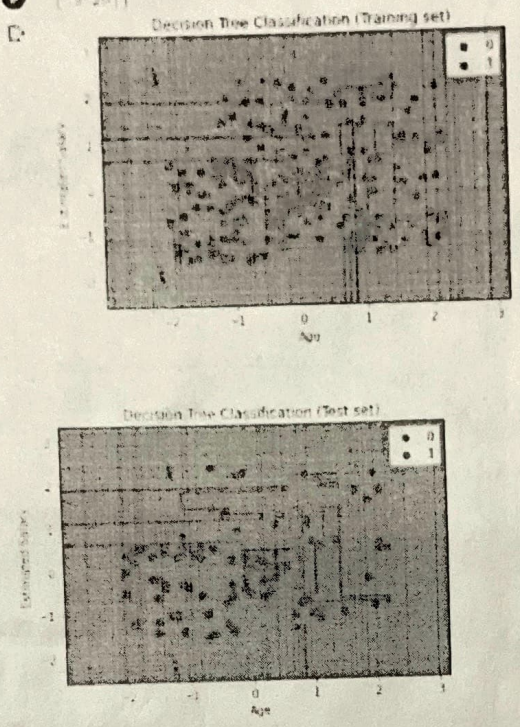
Source Code:

```
from sklearn.neural_network import MLPRegressor
from sklearn.model_selection import train_test_split
from sklearn.datasets import make_regression
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
x,y = make_regression(n_samples=1000, noise=0.05,
                      n_features=1000)
x.shape, y.shape = ((1000,1000),(1000,))
x_train, x_test, y_train, y_test = train_test_split
    (x, y, test_size=0.2, shuffle=True, random_state=42)
clf = MLPRegressor(max_iter=1000)
clf.fit(x_train, y_train)
print(f'R2 Score for Training Data = {clf.score(x_train,y_train
print(f'R2 Score for Test Data = {clf.score(x_test,y_test)}')
```

Output:

R2 score for Test Data = 0.9686558466215229.

OUTPUT :



RESULT:

Thus this result was successfully executed and the output was verified.