Experiment 16: Feed Forward Neural Network Algorithm

Aim:

Implement an Algorithm in Python for solving Feed Forward Neural Network Algorithm

Python Program:

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

X,y=load_breast_cancer(return_X_y = True)

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)

model = MLPClassifier(hidden_layer_sizes=(10, 5), activation='relu', solver='adam',
max_iter=1000)

model.fit(X_train, y_train)

y_pred = model.predict(X_test)

from sklearn.metrics import accuracy_score
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
```

Output:

Accuracy: 0.9736842105263158

Result:

Code has been Implemented successfully.