In [ ]:

```python
from sklearn.neural_network import MLPClassifier
```

In [ ]:

```python
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score
import numpy as np
import matplotlib.pyplot as plt
```

In [ ]:

```python
data=pd.read_csv("D:\\Workshops\\W 15 - Data Science Masterclass\\Data\\Bank.CSV")
data.head()
```

Doing data preprocessing

In [ ]:

```python
data.duplicated().sum()
```

In [ ]:

```python
data.drop_duplicates(inplace=True)
```

In [ ]:

```python
data.duplicated().sum()
```

In [ ]:

```python
data.isnull().sum()
```

Splitting data into traning & testing

In [ ]:

```python
x=data.iloc[:,:7]
y=data.iloc[:,7]
```

In [ ]:

```python
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2,random_state=0)
```

Using Scikit Learn

In [ ]:

```python
clf = MLPClassifier(alpha=0.01,hidden_layer_sizes=(5,3), random_state=1)
```

```python
In [ ]:
clf.fit(x_train,y_train)
```

```python
In [ ]:
y_pred=clf.predict(x_test)
```

```python
In [ ]:
accuracy_score(y_test,y_pred)
```