

PROGRAM

```
from sklearn.neural-network import MLPRegressor  
from sklearn.model_selection import train_test_split  
from sklearn.datasets import make_regression
```

```
X, y = make_regression(n_samples=1000, noise=0.05,  
                      n_features=100)
```

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

```
clf = MLPRegressor(max_iter=100)
```

```
clf.fit(X_train, y_train)
```

```
print(f"R2 score {train y: {clf.score(X_train, y_train)}}")  
print(f"R2 score {test y: {clf.score(X_test, y_test)}}")
```

Expt No: 9

Aim: Implementing Artificial Neural Network for an application using python REGRESSION

PROCEDURE:

1. Data set preparation- you will need data that consists of input features and corresponding numerical values for train & test.
2. Data Preprocessing: Scaling, Splitting & preparing
3. Model building: Building neural network using libraries like Keras or TensorFlow
4. Training: compiling & training data
5. Evaluation: Assessing the models performance

RESULT:

Thus the regression model has been implemented.