Exp No: 11 Implementing artifical neural
Date: networks for an application using
python - Regression.

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=100)
X.shape, Y.shape = (1000, 100), (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)
```

O/P:

R_2 Source for test data = 0.9686558466621529

Result:

The Program was successfully executed and the O/P is verified.