Assignment No. 04

Code:

```
#Importing the required libraries
from sklearn import datasets
import pandas as pd
from sklearn.linear_model import LogisticRegression
from sklearn.model_selection import train_test_split
from sklearn.metrics import precision_recall_curve
from sklearn.metrics import plot_precision_recall_curve
from sklearn.metrics import precision_score
from sklearn.metrics import recall_score
import matplotlib.pyplot as plt

#Loading the data
data = datasets.load_breast_cancer()
df = pd.DataFrame(data.data, columns=data.feature_names)
df['target'] = data.target

#Splitting the data into training and test set
X_train, X_test, y_train, y_test = train_test_split(
                    df.iloc[:,:-1], df.iloc[:,-1], test_size=0.3, random_state=42)

# Initialize and fit the Model
model = LogisticRegression()
model.fit(X_train, y_train)

#Make prediction on the test set
pred = model.predict(X_test

#calculating precision and reall
precision = precision_score(y_test, pred)
recall = recall_score(y_test, pred
print('Precision: ',precision)
print('Recall: ',recall)

#Plotting Precision-Recall Curve
disp = plot_precision_recall_curve(model, X_test, y_test)
```

OUTPUT :

Precision: 0.963963963963964

Recall: 0.9907407407407407