import pandas as pd

import numpy as np

import seaborn as sns

import matplotlib.pyplot as plt

ds=pd.read\_csv("BostonHousing.csv")

print(ds)

ds.info()

sns.set (rc = {'figure.figsize':(12, 10)})

sns.heatmap(ds.corr(),linewidth=.3,annot=True)

plt.show()

X = ds[['crim', 'zn', 'indus', 'chas', 'nox', 'rm', 'age', 'dis', 'rad', 'tax',

'ptratio', 'b', 'lstat']]

Y = ds['medv']

from sklearn.model\_selection import train\_test\_split

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X,Y, test\_size = 0.3, random\_state = 42)

from sklearn.preprocessing import StandardScaler

sc = StandardScaler()

X\_train = sc.fit\_transform(X\_train)

X\_test = sc.fit\_transform(X\_test)

from sklearn.linear\_model import LinearRegression

lr = LinearRegression()

lr.fit(X\_train, y\_train)

y\_pred = lr.predict(X\_test)

print(y\_pred)

from sklearn.metrics import mean\_squared\_error

rmse = np.sqrt(mean\_squared\_error(y\_test, y\_pred))

print("Root Mead squared Error is:")

print(rmse)

print("Training accuracy is:")

lr.score(X\_train, y\_train)

print("Testing accuracy is:")

lr.score(X\_test, y\_test)

print(y\_test)

sns.histplot(x='medv',data=ds)

plt.scatter(y\_pred, y\_test, c = 'green')

sns.scatterplot(x='rm',y='medv',data=ds)

sns.scatterplot(x='lstat',y='medv',data=ds)