#Problem 11.2 – Creating a Baseline Regression Model

from sklearn.datasets import load\_boston

from sklearn.dummy import DummyRegressor

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

#load data

boston=load\_boston()

#create features

features, target = boston.data, boston.target

#make test and training split

features\_train, features\_test, target\_train, target\_test = train\_test\_split(features, target, random\_state=0)

#create a dummy regressor

dummy=DummyRegressor(strategy='mean')

#"Train" dummy regressor

dummy.fit(features\_train, target\_train)

#get R-squared score

print(dummy.score(features\_test, target\_test))

#to compare, train the model and evaluate the performance score

#load library

from sklearn.linear\_model import LinearRegression

#train simple linear regression model

ols=LinearRegression()

ols.fit(features\_train, target\_train)

#get r-squared score

print(ols.score(features\_test, target\_test))