

Graded Assignment 4 The due date for submitting this assignment has passed. Due on 2024-02-18, 23:59 IST. You may submit any number of times before the due date. The final submission will be considered for grading. You have last submitted on: 2024-02-18, 22:22 IST It is mandatory to use sklearn.\_version\_ = 1.2.2 for solving all the questions Instructions: For all graded questions, split the california housing dataset into train and test sets. [Hint: use appropriate API with random\_state=0, shuffle=False and test\_size=0.2] 1) If we use StandardScaler for preprocessing and LinearRegression for fitting the model with training set obtained from following code snippet: 1 point X\_train,X\_test,y\_train,y\_test= train\_test\_split(X,y, test\_size=0.2, shuffle=False, random\_state=0) Assume that (X,y) is the california housing dataset. What is the R squared value for predictions obtained using test set features? Note: Use methods and objects with default parameters 0.66051 0.70623 0.80623 0.90623 Yes, the answer is correct. Score: 1 Accepted Answers: 0.66051 2) If we use StandardScaler for preprocessing and LinearRegression for fitting the model, what is the root mean squared error value for predictions obtained 1 point using test set features? Note: Use methods and objects with default parameters 0.8241

0.9241 0.7033 0.6241 Yes, the answer is correct. Score: 1 Accepted Answers: 0.7033

Instructions for next ques from Que 3 to 8

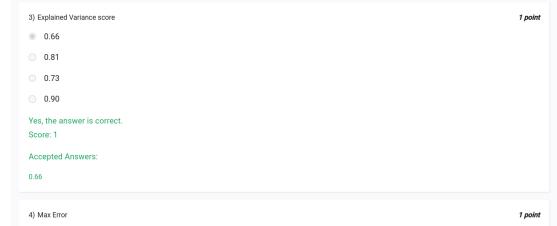
0.18

Split the data into training and test sets with random\_state=0, shuffle=False and test\_size=0.2 parameters.

Let, y\_test= target label in test set of california housing dataset

and y\_pred=target labels obtained by the model using X\_test

Then compute values of the following evaluation metrics



O 2.16	
0.66	
7.26	
Yes, the answer is correct. Score: 1	
Accepted Answers:	
7.26	
5) Mean Absolute Error	1 p
0.213	
0.516	
0.398	
0.422	
Yes, the answer is correct. Score: 1	
Accepted Answers:	
0.516	
6) Mean Squared Error	1 pc
0.038	
0.494	
0.506	
0 0.872	
Yes, the answer is correct. Score: 1	
Accepted Answers:	
0.494	
structions: for Ques 7 to 8, perform SGD Regression on the given (scaled using ndom_state=0.  7) What is the bias term?  2.0112	g StandardScalar()) dataset, using default hyperparameters and
0 1.0704	
0.0704	
3.0704	
Yes, the answer is correct. Score: 1	
Accepted Answers:	
2.0112	
8) What are the coefficients in predicted model?	1 p
8) What are the coefficients in predicted model?  [ 0.9268, 2.1200, -0.2552 , 0.3310 , -0.0076,0.02969, -0.9130 , -0.8845]	1 р
	1 р.
0.9268, 2.1200, -0.2552, 0.3310, -0.0076,0.02969, -0.9130, -0.8845]	1 р.
[0.9268, 2.1200, -0.2552, 0.3310, -0.0076,0.02969, -0.9130, -0.8845] [1.8268, 0.1200, -2.2552, 0.3310, -0.0076,0.02969, -0.9130, -2.8845]	1 р.
[0.9268, 2.1200, -0.2552, 0.3310, -0.0076,0.02969, -0.9130, -0.8845] [1.8268, 0.1200, -2.2552, 0.3310, -0.0076,0.02969, -0.9130, -2.8845] [0.8404, 0.1123, -0.4121, 0.2159, -0.0178, -0.01480, -0.8739, -0.8391]	1 р.
[0.9268, 2.1200, -0.2552, 0.3310, -0.0076,0.02969, -0.9130, -0.8845] [1.8268, 0.1200, -2.2552, 0.3310, -0.0076,0.02969, -0.9130, -2.8845] [0.8404, 0.1123, -0.4121, 0.2159, -0.0178, -0.01480, -0.8739, -0.8391] [0.9268, 0.3200, -0.2552, 0.4310, -0.0076,0.02969, -0.9130, -1.8845]  Yes, the answer is correct.	1 pc