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a. Perform a k-NN prediction with all predictors (ignore the CAT.MEDV column). Report accuracy trying values of K from 1 to 5. Report accuracy trying values of K from 1 to 5.

iteration	k-NN (3).k	root_m...
4	4	4.076
2	2	3.147
5	5	4.222
1	1	23.958
3	3	3.664

b. Findout your best K

K=2

c. Predict MEDV for a tract with the following information, using the best K:

Row No.	prediction(M...	CRIM	ZN	INDUS	CHAS	NOX	RM	AGE	DIS	RAD	TAX
1	24	-0.419	0.285	-1.287	-0.272	-0.144	0.413	-0.120	0.140	-0.982	-0.666

d. If the purpose is to predict MEDV for several thousands of new tracts, what would be the disadvantage of using k-NN prediction?

k-NN is a memory-based algorithm, meaning it requires storing the entire training dataset in memory. This can lead to memory issues if the training dataset is very large.