



What method is used in scikit learn library to train a model?

- train
- fit
- predict
- calculate

## Q2



What are we actually doing when we are training a linear regression model?

- memorizing the training dataset
- choosing the cost function
- calculating the bias and the coefficients
- calculating the optimal learning rate

Q3



For a dataset with 10 features, how many parameters of linear regression model do we need to learn in training?

- 9
- 11
- 10
- 20

## Q4



Why do we use regularization in linear regression?

- to decrease the training error
- to increase underfitting
- to obtain a more complex model
- to decrease overfitting



Increasing the penalty parameter in Lasso regression results in:

- Increasing the number of features used in the final model
- Decreasing the number of features used in the final model
- Having all the features contributing equally to the final model
- Decreasing the training error





The simplest model always generalizes better.

- True
- False



We trained a regression model and it has an RMSE of 5. Is this a good model?

- yes, 5 is a small value
- no, 5 is a large value
- depends on the units of y
- depends on the number of features

## Q8



What is the most important characteristic of a well-performing machine learning model?

- low error on the training dataset
- low error on the hold out data
- low model complexity
- low values of the parameters



Below are training and test error for some different values of a hyperparameter. Which value should we use?

- 2
- 7
- 12
- 18

Q10



I managed to setup the python environment for this course and I successfully ran the Notebook 1.

- True
- False