- Which of the following methods do we use to find the best fit line for data in Linear Regression?

  Ans) Both A and B

- Which of the following statement is true about outliers in linear regression?

  Ans) Linear regression is sensitive to outlier

- A line falls from left to right if a slope is

  Ans) Negative

- Which of the following will have symmetric relation between dependent variable and independent variable?

  Ans) correlation

- Which of the following is the reason for over fitting condition

  Ans) High bias and high variance

- Lasso and Ridge regression techniques belong to

  Ans) Regularization

- To overcome with imbalance dataset which technique can be used

  Ans) Cross Validation

- The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses _____ to make graph?

  Ans) TPR and FPR

- In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.

  Ans) True

- Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression

  Ans) We don’t have to choose the learning rate.

Regularization:

Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting

- Which particular algorithms are used for regularization

  Ans) Ridge(L2) Regularization

  Lasso (L1) Regularization

Explain the term error present in linear regression equation

Linear regression most often uses mean-square error (MSE) to calculate the error of the model. MSE is calculated by:

1. measuring the distance of the observed y-values from the predicted y-values at each value of x;
2. squaring each of these distances;
3. calculating the mean of each of the squared distances.

Linear regression fits a line to the data by finding the regression coefficient that results in the smallest MSE.