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

Ans: Least Square Error

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

Ans: Linear regression is sensitive to outliers

1. A line falls from left to right if a slope is \_\_\_\_\_\_?

Ans: Negative

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

Ans: Correlation

1. Which of the following is the reason for over fitting condition?

Ans: High bias and high variance

1. If output involves label then that model is called as:

Ans: Predictive modal

1. Lasso and Ridge regression techniques belong to \_\_\_\_\_\_\_\_\_?

Ans: Regularization

1. To overcome with imbalance dataset which technique can be used?

Ans: SMOTE

1. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary

Ans: TPR and FPR

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

Ans: False

1. Pick the feature extraction from below:

Ans: Construction bag of words from a email

1. Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression?

Ans: A) We don’t have to choose the learning rate, B) It becomes slow when number of features is very large. C) We need to iterate

1. Explain the term regularization?

Ans: Regularization mean to make things regular or acceptable. In machine learning regularization is the process which regularizes or shrinks the coefficient towards zero. Regularization discourages learning a more complex or flexible model to prevent overfitting.

1. Which particular algorithms are used for regularization?

Ans: There are three main techniques :

1. Ridge Regression
2. Lasso
3. Dropout

Ridge and Lasso can be used for any algorithms involving weight parameter including neural nets. Dropout is primarily used in any kind of neural network to moderate the learning.

1. Explain the term error present in linear regression equation?

Ans: Within a linear regression model tracking a stock’s price over time. The error term is the difference between the expected price at a particular time and the price that was actually observed.