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

Ans- Least Square Error

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

Ans- Linear regression is sensitive to outliers

3. A line falls from left to right if a slope is _____?

Ans- Negative

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

Ans- Correlation

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

Ans- Low bias and low variance

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

Ans- Predictive modal

7. Lasso and Ridge regression techniques belong to _____?

Ans- Regularization

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

Ans- SMOTE

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

Ans- TPR and FPR

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

Ans- True

11. Ans - Apply PCA to project high dimensional data

12. 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.

13. Explain the term regularization?

Ans- Regularization is a set of methods for reducing overfitting in machine learning models. Typically, regularization trades a marginal decrease in training accuracy for an increase in generalizability. Regularization encompasses a range of techniques to correct for overfitting in machine learning models

14. Which particular algorithms are used for regularization?

Ans- Lasso regression AKA L1 regularization. ...
- Ridge regression AKA L2 regularization. ...
- Elastic Net (L1 + L2) regularization. ...
- Ensembling. ...
- Neural network dropout. ...
- Pruning decision tree-based models. ...
- Data augmentation.

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

Ans- An error term appears in a statistical model, like a regression model, to indicate the uncertainty in the model. The error term is a residual variable that accounts for a lack of perfect goodness of fit.