Worksheet_set_1

1. D) Both A and B
2. A) Linear regression is sensitive to outliers
3. B) Negative
4. B) Correlation
5. C) Low bias and high variance
6. B) Predictive model
7. D) Regularization
8. D) SMOTE
9. A) TPR and FPR
10. B) False
11. A) Constructing a bag of words from an email
12. The correct options are:A) We don't have to choose the learning rate. D) It does not make use of the dependent variable.
13. Regularization is a technique used in machine learning to prevent overfitting and improve the generalization performance of a model. There are two main types of regularization techniques: L1 regularization (also known as Lasso regularization) and L2 regularization (also known as Ridge regularization).
14. Regularization can be applied to a variety of machine learning algorithms, but it is particularly useful for linear regression, logistic regression, and neural networks. Here are some specific algorithms and techniques that use regularization: a) Lasso Regression b) Ridge Regression c) Elastic Net Regression d) Dropout e) Batch Normalization
15. In linear regression, the error refers to the difference between the actual observed values of the dependent variable and the predicted values obtained from the linear regression equation. The error is also known as the residual, and it represents the amount of variability in the dependent variable that is not explained by the independent variable(s).