

Machine Learning

1. A. Least square error
2. A. Linear Regression is sensitive to outliers
3. B. Negative
4. B. Correlation
5. C. Low bias high variance
6. B. Predictive model
7. D. Regularization
8. D. Smote
9. A. TPR and FPR
10. B. False
11. B. Apply PCA to project high dimensional data
12. A we don't have to choose a learning rate
B It becomes slow when the number of features are large
d. It doesn't make use of dependent variable
13. Regularization is a technique to prevent the model from overfitting by adding extra information to it. Overfitting is a unfavourable situation where model understands the train data but doesn't perform well in the test data. It means that the model is not able to predict the outcome when it deals with unseen data. Regularization technique provides a shrinkage penalty to the cost function and constraints the weight/coefficient of features.
Hence, it maintains accuracy and generalization of the model.
14. Lasso and ridge algorithms are used for regularization.
15. Error is the difference between the predicted outcome and actual outcome. On regression graph the distance between the precited line and actual outcome points is called error.