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 and 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 the learning rate.
    B) It becomes slow when number of features is very large.
    C) We need to iterate.

13. Regularization :

    Regularizations are techniques used to reduce the error by fitting a function appropriately on the given training set and avoid overfitting. This is a form of regression, that constrains/ regularizes or shrinks the coefficient estimates towards zero. this technique discourages learning a more complex or flexible model, so as to avoid the risk of overfitting.

14. The commonly used regularization techniques are :

    1. L1 regularization(LASSO)
    2. L2 regularization(RIDGE)
    3. Dropout regularization

15. the error term is the amount at which the equation may differ during empirical analysis. it refers to the sum of the deviations within the regression line, which provides an explanation for the difference between the theoretical value of the model and the actual observed results.