1.A. Least Square Error

2.A. Linear regression is sensitive to outliers

3.B. Negative

4.C. Both of them

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. Sometimes it is seen the dependence of target on some features is very high while dependence of target on some features is negligible. This leads to overfitting or underfitting which reduces the accuracy of the model. To avoid overfitting and underfitting we have to use regularization. Two common regularization techniques are lasso and ridge regression.

In lasso regression we reduce the corresponding coefficients to zero if the dependence of the target variable on a feature is negligible.

In ridge regression we reduce the difference between the coefficients of the dependent variables.

14. Lasso and Ridge regression algorithms are used for regularization.

15. Difference between test_y value and the value predicted by the model for a given row of test_x data is known as term error.