MachineLearning\_Assignment

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Ans01- A)- Least Square Error

Ans02- A)-Linear regression is sensitive to outliers

Ans03-B)-Negative

Ans04- B)-Correlation

Ans05- C)- Low Bias and high Variance

Ans06- B)- Predictive Model

Ans07- D)- Regularization

Ans08- D)- SMOTE

Ans09- A)- TPR and FPR

Ans10-B)-False

Ans11- D)- Forward Selection

Ans12- A), B) & C)

Ans13- Regularizations are techniques used to reduce the error by fitting a function appropriately on the given training set and avoid overfitting:

The common method used for regularization are:

- 1. Lasso
- 2. Ridge

Ans14- The Algorithms used for regularization are:

## 1. <u>Lasso (L1):</u>

Lasso regression is basically a feature selection algorithm. It will ignore the features which has no effect on the label

## 2. Ridge(L2):

Ridge regression algorithm works by reducing the weightage of all such features which do not have any effect on the label. This algorithm does not ignore any features

Ans15- The error in linear regression equation in graphical terms is the shortest distance between the observed value and the best fit line