

Machine learning assignment

- 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) C) Sensitivity and Specificity
- 10) A) True
- 11) B) Apply PCA to project high dimensional data
- 12) A) We don't have to choose the learning rate. And B) It becomes slow when number of features is very large.
- 13) Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.
- 14) Lasso regression and ridge regression.
- 15) A regression line always has an error term because, in real life, independent variables are never perfect predictors of the dependent variables. Rather the line is an estimate based on the available data. So the error term tells you how certain you can be about the formula.