

1. A) High R^2 value for train-set and high r^2 value for test-set
2. C) Decision trees are not easy to interpret
3. C) Random Forest
4. A) Accuracy
5. B) Model B
6. A) Ridge, D) Lasso
7. B) Decision Tree, C) Random Forest
8. A) Pruning, C) Restricting the max depth of the tree
9. D) None of the above
10. Whenever the number of independent variable increases the adjusted R^2 will penalize the formula so that the total value will come down.
11. The basic difference between Lasso and Ridge regularization method is that; Lasso regression takes the magnitude of coefficients while ridge regression takes the square.
12. VIF is a measure of amount of multicollinearity in regression analysis. VIF value 1 is considered to be the best for model, whereas VIF value between 5 to 10 represents there are high multicollinearity.
13. We scale data before feeding it to train the model to ensure the GD moves smoothly towards the minima and the steps/learning rate for the GD are updated for same rate for all features.
14. Mean Squared Error, Absolute Mean Error, Root Mean Squared Error are the various metrics used to determine the good fit for linear regression.
15. Precision: 0.45
Accuracy: 0.88
Sensitivity: 0.80