

1. A
2. D
3. B
4. A
5. A
6. A
7. B
8. C
- 9.
10. Random forest algorithm avoids and prevents overfitting by using multiple trees. The results are not accurate. This gives accurate and precise results. Decision trees require low computation, thus reducing time to implement and carrying low accuracy.
11. Scaling can make a difference between a weak machine learning model and a better one. The most common techniques of feature scaling are Normalization and Standardization.
12. We can use fixed learning rate during training without worrying about learning rate decay. It has straight trajectory towards the minimum and it is guaranteed to converge in theory to the global minimum if the loss function is convex and to a local minimum if the loss function is not convex.
13. accuracy does not holds good for imbalanced data. In business scenarios, most data won't be balanced and so accuracy becomes poor measure of evaluation for our classification model.
14. The F-score is a measure of a test's accuracy. It is calculated from the precision and recall of the test, where the precision is the number of true positive results divided by the number of all positive results, including those not identified correctly, and the recall is the number of true positive results divided by the number of all samples that should have been identified as positive. $F\text{-Measure} = (2 * \text{Precision} * \text{Recall}) / (\text{Precision} + \text{Recall})$
15. The fit() method helps in fitting the data into a model, transform() method helps in transforming the data into a form that is more suitable for the model. Fit_transform() method, on the other hand, combines the functionalities of both fit() and transform() methods in one step.