1. A
2. A
3. D
4. C
5. B
6. B
7. C
8. A & D
9. B & C
10. A & B
11. When the number of categories in the dataset is quite large. One Hot Encoding should be avoided. Binary encoding might be a good alternative to one-hot encoding because it creates fewer columns when encoding categorical variables.
12. When we are using an imbalanced dataset, we can oversample the minority class using replacement. This technique is called oversampling. Similarly, we can randomly delete rows from the majority class to match them with the minority class which is called undersampling.
13. The key difference between ADASYN and SMOTE is that the former uses a density distribution, as a criterion to automatically decide the number of synthetic samples that must be generated for each minority sample by adaptively changing the weights of the different minority samples to compensate for the skewed distributions.
14. GridSearchCV is a technique for finding the optimal parameter values from a given set of parameters in a grid. It's essentially a cross-validation technique. The complexity of Grid Search CV increases with an increase in the number of parameters in the param grid. Thus Grid Search CV technique is not recommended for large-size datasets or param grids with a large number of components.
15. Mean Absolute Error(MAE): MAE is a very simple metric which calculates the absolute difference between actual and predicted values.
    Mean Squared Error(MSE): MSE is a most used and very simple metric with a little bit of change in mean absolute error. Mean squared error states that finding the squared difference between actual and predicted value.
    Root Mean Squared Error(RMSE): As RMSE is clear by the name itself, that it is a simple square root of mean squared error.
    R Squared (R2): R2 score is a metric that tells the performance of your model, not the loss in an absolute sense that how many wells did your model perform.
    Adjusted R Squared: The disadvantage of the R2 score is while adding new features in data the R2 score starts increasing or remains constant but it never decreases because It assumes that while adding more data variance of data increases.