**MACHINE LEARNING INTERVIEWQUESTIONSAND ANSWERS** :

1. **LINEAR REGRESSION :**
2. What is linear regression? What are assumptions made by linear regression?

Linear regression is a statistical method used to model the relationship between a dependent variable (target) and one or more independent variables (predictors). The goal is to find the best-fitting line through the data points that predicts the target variable.

* **What Are the Basic Assumption?(important)**

There are four assumptions associated with a linear regression model:

1. Linearity: The relationship between X and the mean of Y is linear.
2. Homoscedasticity: The variance of residual is the same for any value of X.
3. Independence: Observations are independent of each other.
4. Normality: For any fixed value of X, Y is normally distributed.
5. Explain the mathematical intuition of linear regression.
6. What is the best fit line?
7. What is r2 score.
8. What is adjusted r2 score?
9. What are pros and cons of linear regression?
10. What is multiple linear regression?
11. What are realtime use cases of linear regression