## Pysofts Solutions Corporate Training Center, Pune

## **Linear Regression Interview Questions**

- 1. What is Linear regression?
- 2. How do you represent a simple linear regression?
- 3. What is multiple linear regression?
- 4. What are the assumptions made in the Linear regression model?
- 5. What if these assumptions get violated?
- 6. What is the assumption of homoscedasticity?
- 7. What is the assumption of normality?
- 8. How to prevent heteroscedasticity?
- 9. What does multicollinearity mean?
- 10. What are feature selection and feature scaling?
- 11. What is How to find the best fit line in a linear regression model?
- 12. Why do we square the error instead of using modulus?
- 13. What are techniques adopted to find the slope and the intercept of the linear regression line which best fits the model?
- 14. Explain Ordinary Least Squares Regression in brief.
- briefly explain gradient descent
- 16. How to evaluate regression models? (MSE)
- 17. Which evaluation technique should you prefer to use for data having a lot of outliers in it?
- 18. What is residual? How is it computed? (actual y estimated y)
- 19. What are SSE, SSR, and SST? and What is the relationship between them?
- 20. What's the intuition behind R-Squared?
- 21. What does the coefficient of determination explain?
- 22. Can R<sup>2</sup> be negative?
- 23. What are the flaws in R-squared?
- 24. What is adjusted R<sup>2</sup>?
- 25. What is the Coefficient of Correlation: Definition, Formula
- 26. What is the relationship between R-Squared and Adjusted R-Squared?
- 27. What is the difference between overfitting and underfitting?
- 28. How to identify if the model is overfitting or underfitting?
- 29. How to interpret a Q-Q plot in a Linear regression model?
- 30. What are the advantages and disadvantages of Linear Regression?