

# Velocity Corporate Training Center, Pune

## **Logistic Regression Interview Questions**

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1. What is Data Science? List the differences between supervised and unsupervised learning.
2. What is logistic regression?
3. Why is logistic regression very popular?
4. Why can't linear regression be used in place of logistic regression for binary classification?
5. What is the formula for the logistic regression function?
6. What are the assumptions made in logistic regression?
7. What is correlation and covariance in statistics?
8. Why is logistic regression called regression and not classification?
9. Explain the general intuition behind logistic regression
10. Explain the significance of the sigmoid function.
11. What are the odds?
12. What is the decision boundary?
13. What are outliers and how can the sigmoid function mitigate the problem of outliers in logistic regression?
14. Can the cost function used in linear regression work in logistic regression?
15. What is over-fitting and under-fitting in the context of Machine Learning?
16. How can we avoid over-fitting in regression models?
17. What are the outputs of the logistic model and the logistic function?
18. Why can't we use Mean Square Error (MSE) as a cost function for logistic regression?
19. What is the Confusion Matrix?
20. What are the false positives and false negatives?
21. What are the true positive rate (TPR), true negative rate (TNR), false-positive rate (FPR), and false-negative rate (FNR)?
22. What are precision and recall?
23. Write the equation and calculate the precision and recall rate.
24. What is F-measure? (F-Beta)
25. How can you calculate accuracy using a confusion matrix?
26. What are sensitivity and specificity?
27. How to choose a cutoff point in case of a logistic regression model?
28. How will you deal with the multiclass classification problem using logistic regression?

29. Explain the use of ROC curves and the AUC of a ROC Curve.
30. What is regularisation? Why is it useful?