# Logistic Regression-1

## Assignment Questions

**Q1.** Explain the difference between linear regression and logistic regression models. Provide an example of a scenario where logistic regression would be more appropriate.

**Q2.** What is the cost function used in logistic regression, and how is it optimized?

**Q3.** Explain the concept of regularization in logistic regression and how it helps prevent overfitting.

**Q4.** What is the ROC curve, and how is it used to evaluate the performance of the logistic regression model?

**Q5.** What are some common techniques for feature selection in logistic regression? How do these techniques help improve the model's performance?

**Q6.** How can you handle imbalanced datasets in logistic regression? What are some strategies for dealing with class imbalance?

**Q7.** Can you discuss some common issues and challenges that may arise when implementing logistic regression, and how they can be addressed? For example, what can be done if there is multicollinearity among the independent variables?

**Note:** *Create your assignment in Jupyter notebook and upload it to GitHub & share that github repository link through your dashboard. Make sure the repository is public.*