**Write about any difficult problem that you solved. (According to us difficult - is something which 90% of people would have only 10% probability in getting a similarly good solution).**

When I was doing my internship few interns alongside were working on the same POC which was Vehicle Insurance Fraud Detection to predict the insurance claim is fraud or not. During the 1st iteration my recall was about 68% which was similar in the case of all the other interns with me. But our TL wanted us to improve the recall. So went on doing some research and able to derive new features and also did different encoding on the data which lead me on improving the recall score to 80% which is higher than the other interns who were working on the same POC along with me.

**Explain back propagation and tell us how you handle a dataset if 4 out of 30 parameters have null values more than 40 percentage.**

Back Propagation is a function or set of method of Neural Networks which follows iterative, recursive, and efficient method by updating weights to train a Neural Network Model through a gradient descent approach.

If there is 40% of Missing values in a dataset, I would do some research on the variable, whether it will contribute in predicting the model. If it is helpful, I would go on handling the missing values by imputing it with some imputing techniques like mean, median and mode based on the data type of the variable. If it is not helpful, I’ll be dropping the parameter.