**Is CART the right technique to use when the dependent variable is skewed towards one of the class?**

**If the dependent variable is skewed towards one of the class then we have a case of class imbalance and model will be biased towards the class which has majority. The data will have attributes which are describing the majority class and there will be very less attributes for class which will be in minority, which will make the overall model biased.**

**One of the critical steps is to perform EDA, data profiling and understand the business case in hand.**

**We can treat the data with following**

1. **Reduction of data from majority class – Down sizing**
2. **Increasing the minority class data points – Up sampling**
3. **Synthetic data generation - SMOTE**

**If yes, can we use classification accuracy as the right performance measure?**

**In case of imbalanced data, accuracy is not the right performance measure because even though it may be high, it might miss out critical false negatives which might cost a lot to business.**

**If not why? In that case, which model performance measures should be used?**

**We should use Sensitivity if we want to capture the critical False Negatives and focus on Specificity if false positives are important for business case.**