

# Boosting Algorithm

## 3.LG Boosting

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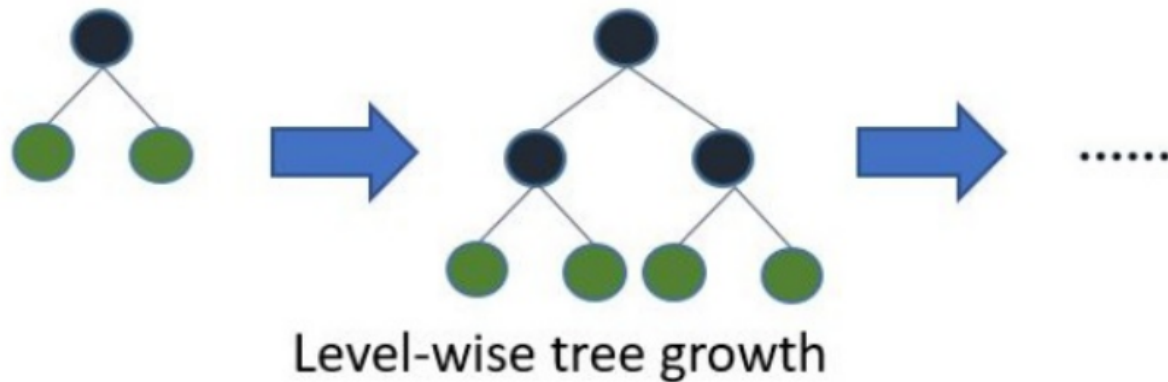
- LightGBM grows tree leaf-wise i.e. it grows vertically as compared to other algorithms which grow horizontally(level-wise growth)
- Also, while growing leaf-wise the loss can be reduced more effectively.
- The errors are minimized using the gradient-based method.

# Why LightGBM?

- LightGBM is better because it supports GPU learning,
- It uses lesser memory and faster processing with large datasets and that's all we want.
- It is sensitive to smaller dataset so I suggest to use it only when you have around 10,000+ rows.

# Difference in LightGBM and XGBoost

XGBoost:



LightGBM:

