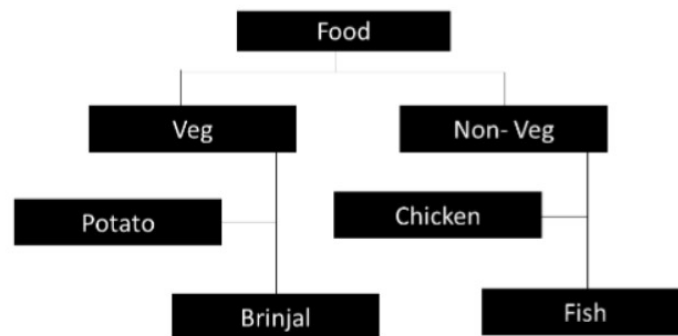# Regression Trees

Regression trees are built via binary recursive partitioning, an iterative interaction that splits the data into segments or branches.

This method subsequently separates each data set into smaller groups. When the dependent variable has continuous values, such as when splitting the food segment of a regression model tree into vegetarian and non-vegetarian portions, it keeps dispersing into smaller groups.

"A regression tree is a type of decision tree that is used for predicting continuous numerical outcomes. The tree is structured with decision nodes that split the data based on the input features, and leaf nodes that provide the predicted continuous value by averaging the target variable in that leaf."

e.g. Predicting house prices based on features like the number of rooms, size of the garden, and location.