

Working with Nodes in Hierarchy



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Overview



Nodes

- Depth
- Breadth
- Position
- Descendants

Demo



Properties of Nodes

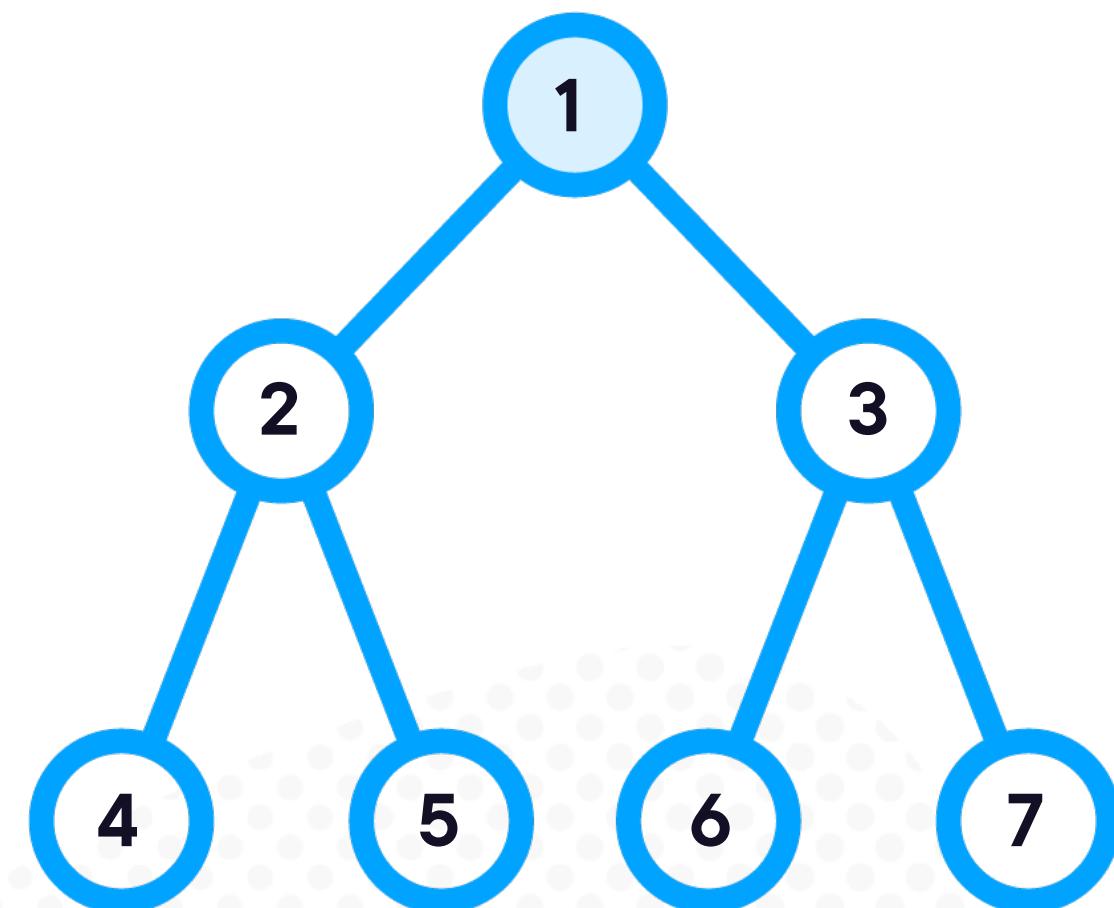


Nodes are single parts in a bigger structure called 'hierarchy' in the Hierarchyid system. These nodes are linked to each other like a parent and child in a family.



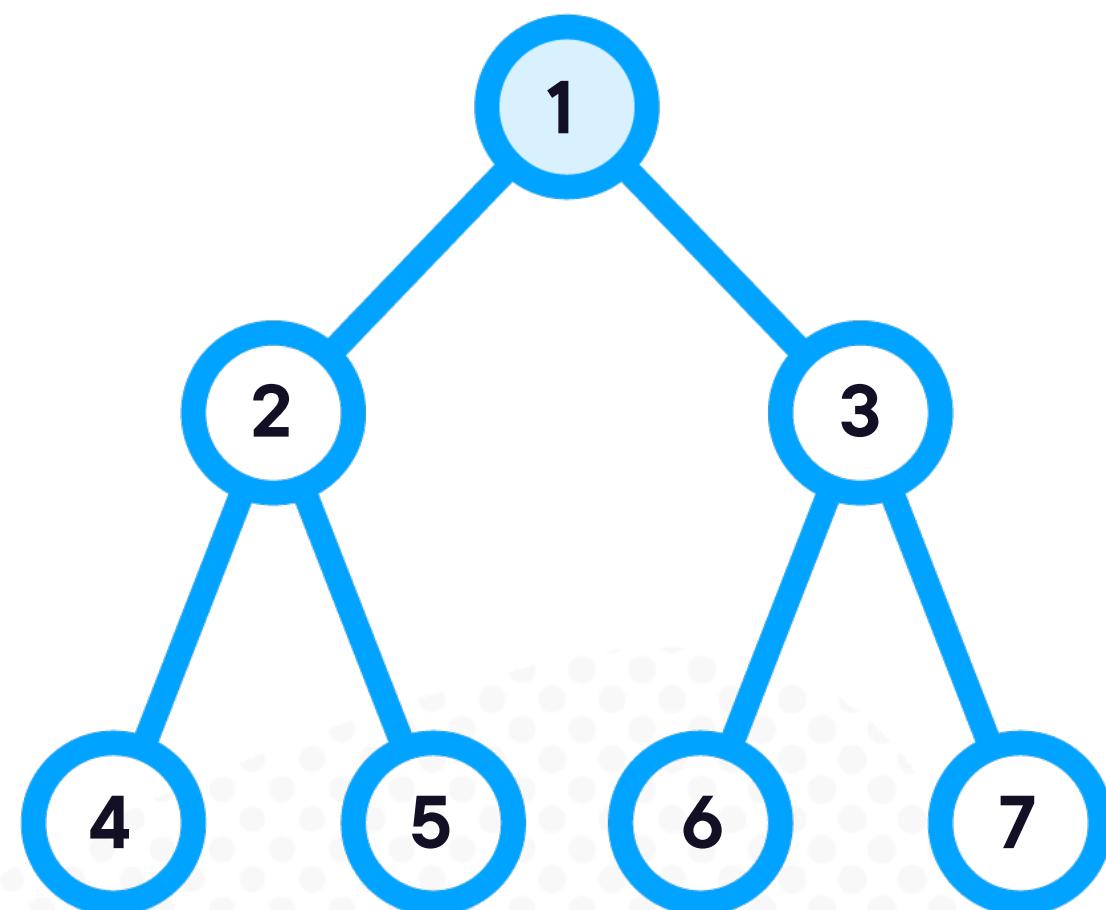
Nodes

Building blocks of hierarchy



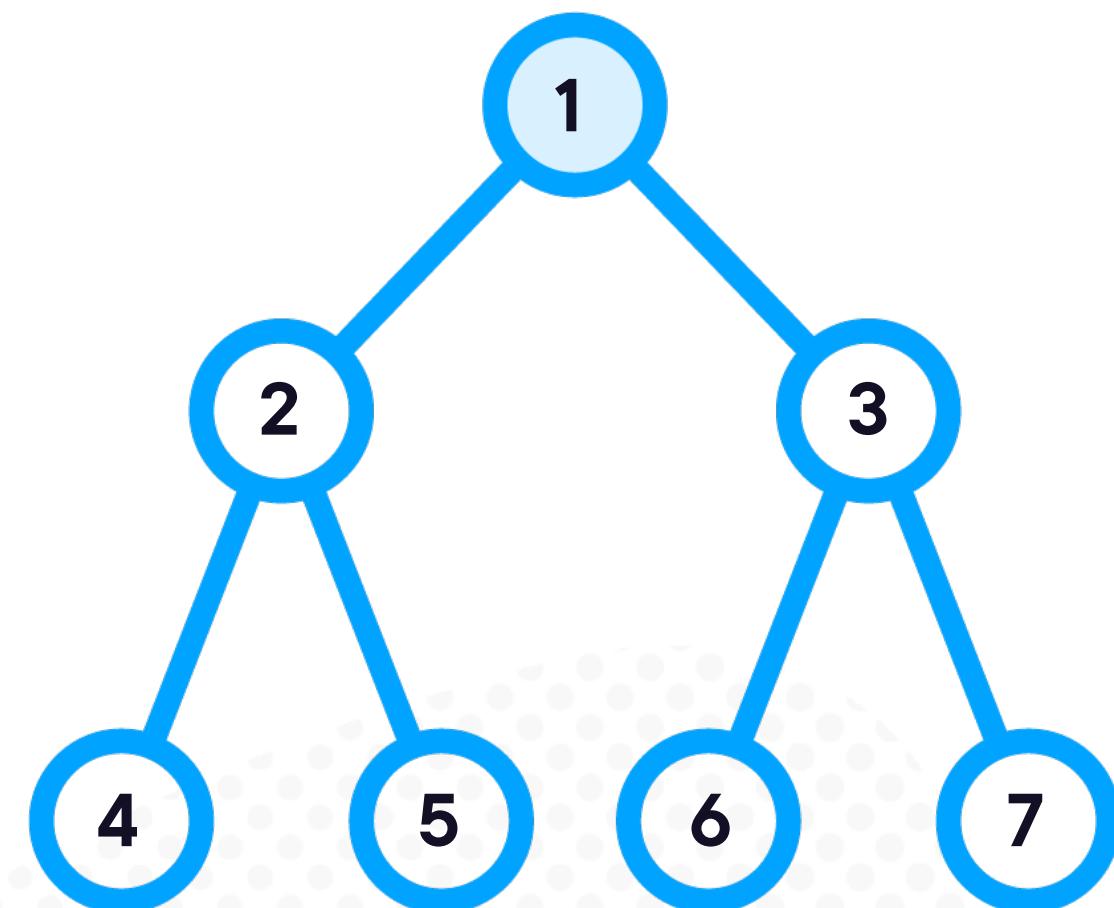
Depth

Measurement of distance from a specific node



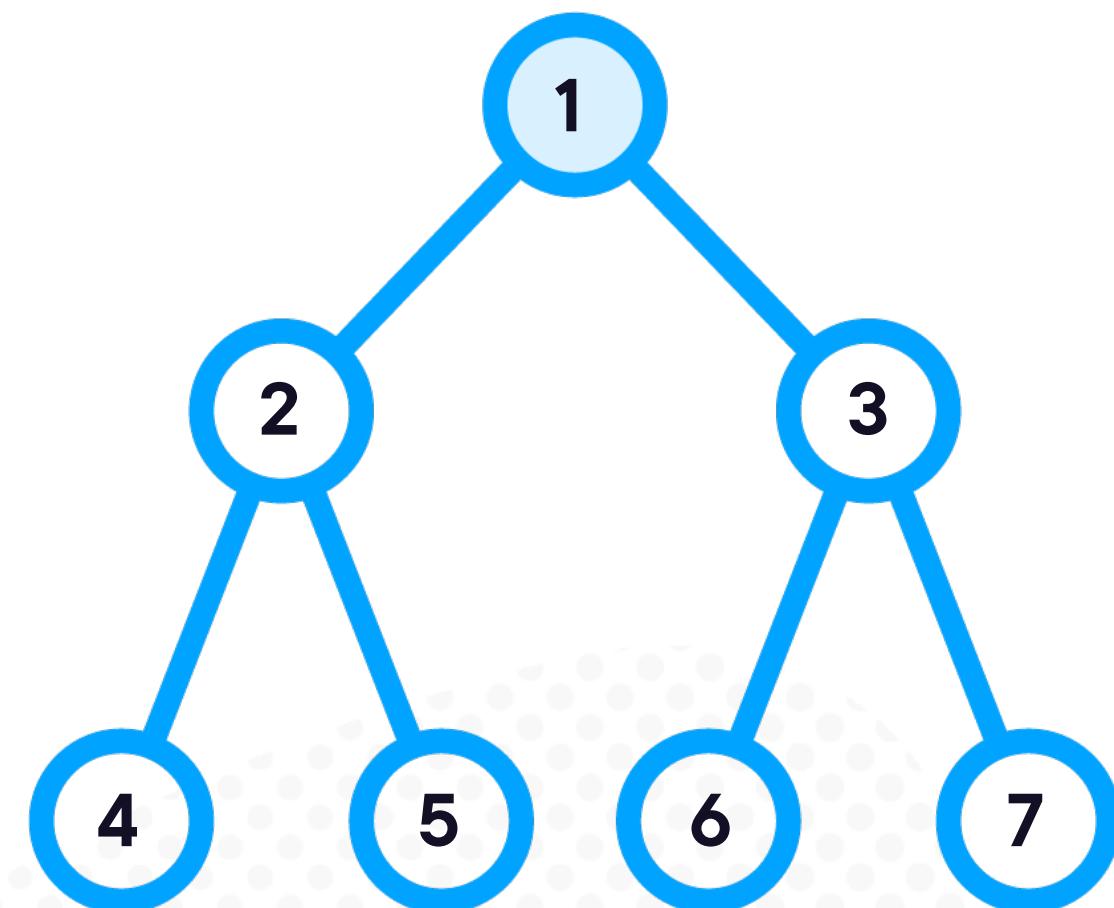
Breadth

Quantifying nodes at particular hierarchical levels



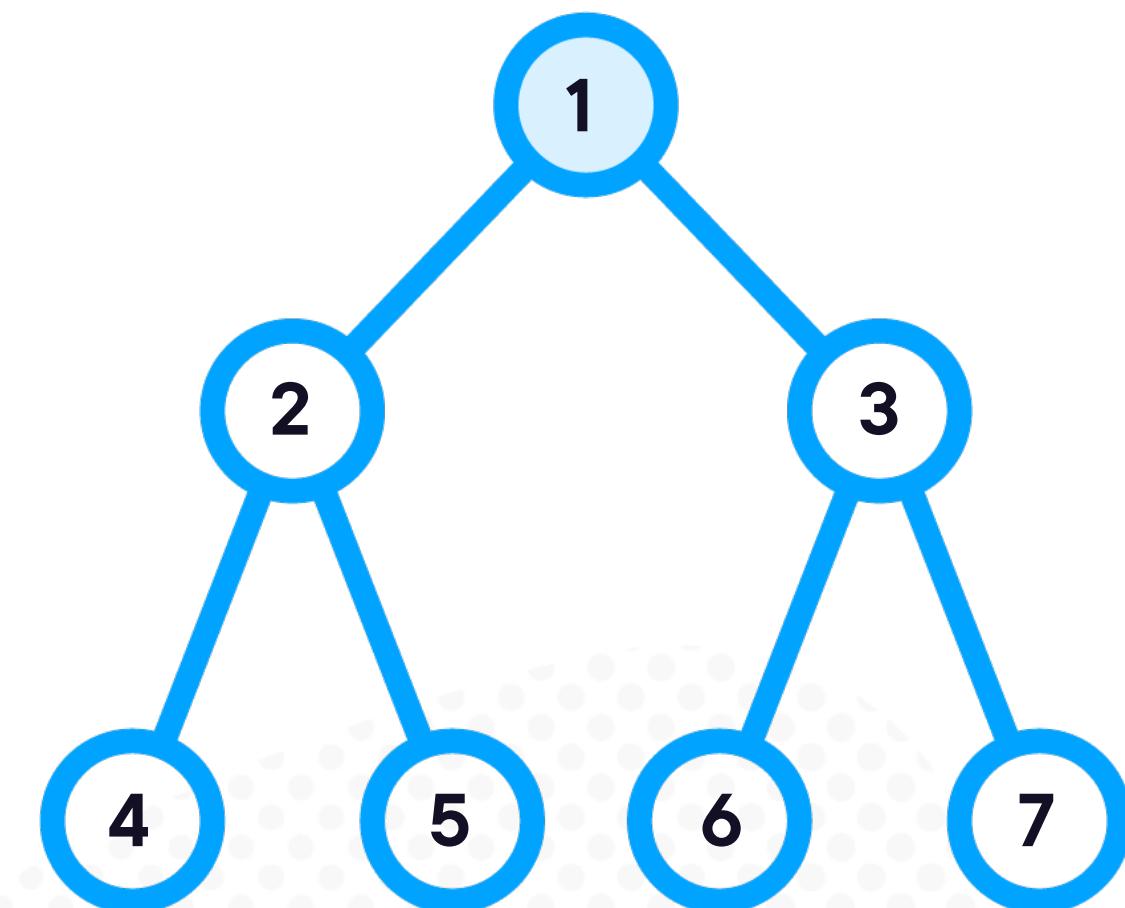
Position

Determining relative placement among sibling nodes



Descendants

Understanding nodes that exist below a node



Demo



Finding descendants by traversing the hierarchy



Demo



Inserting nodes in an existing hierarchy



Demo



Moving nodes in an existing hierarchy



Demo



Calculate depth and breadth with recursive CTEs



Best Practices



Plan hierarchy structure for logical organization and clarity

Balance depth and breadth to enhance performance and comprehension

Precise node positioning for accurate representation of relationships

Efficiently manage descendants using hierarchyid properties for optimization



Up Next:

Optimizing Performance and Maintaining Integrity

