

ALGORITHMS & DATA STRUCTURES

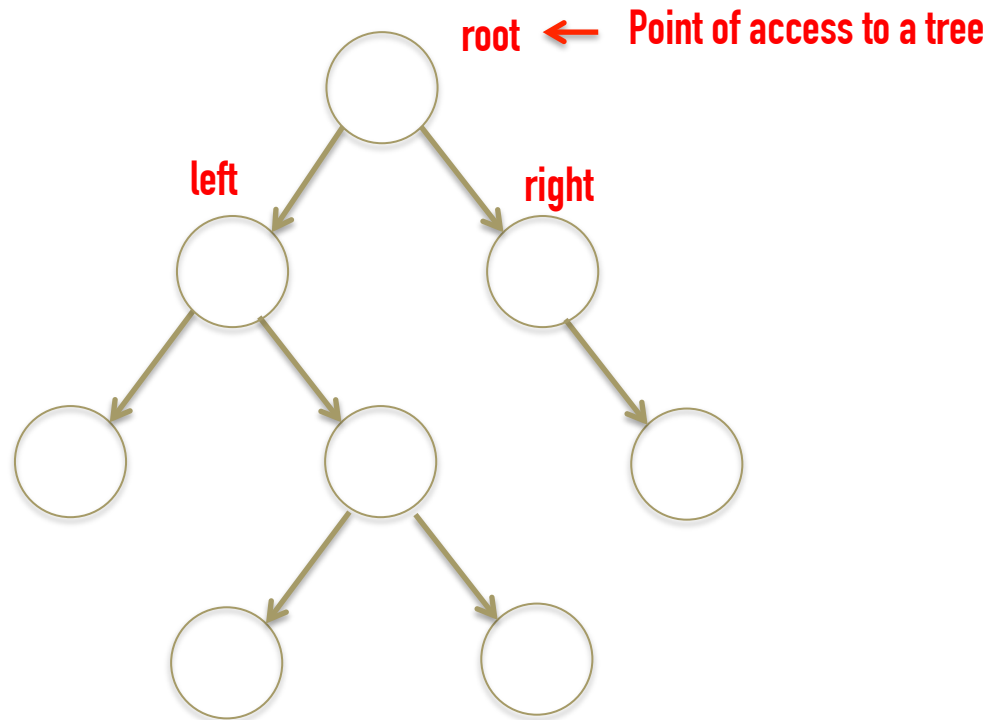
Binary Trees

DEPARTMENT OF COMPUTING

A. Beghelli
Exam revision – May 2019

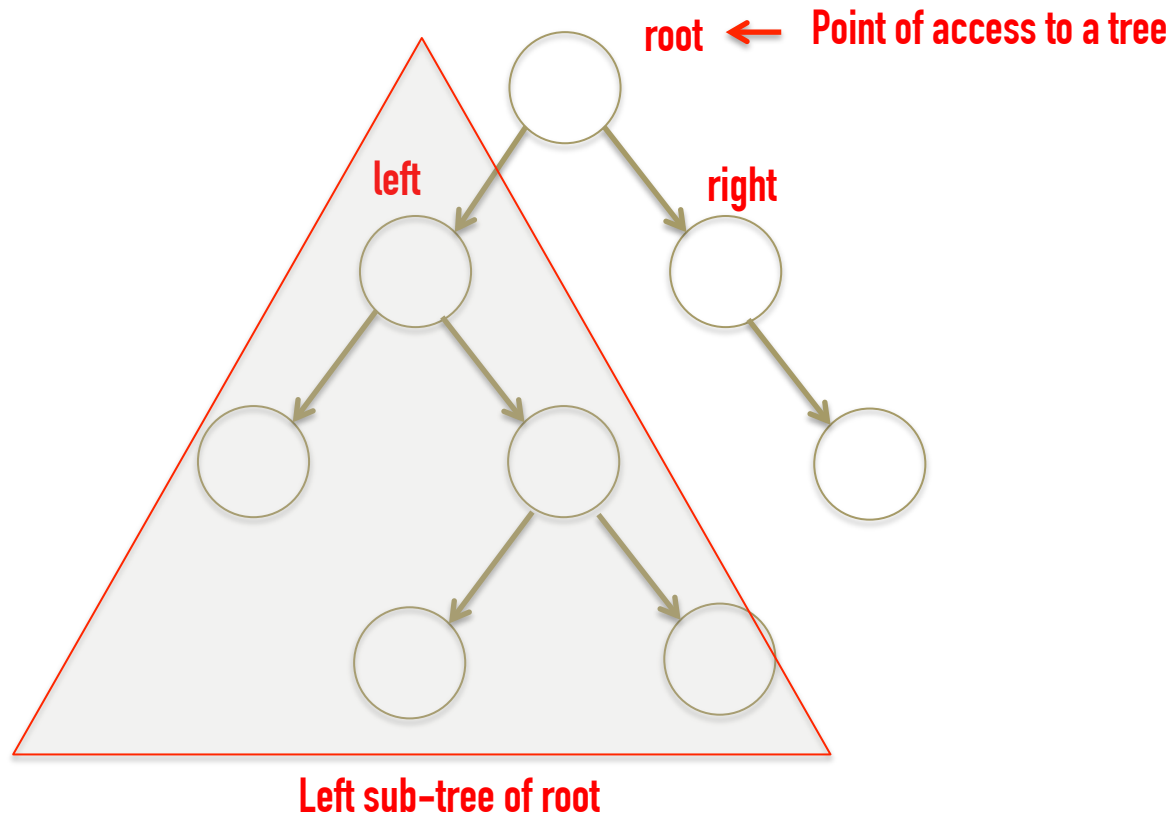
What is a binary tree?

An ordered collection of data, organised in a hierarchical way



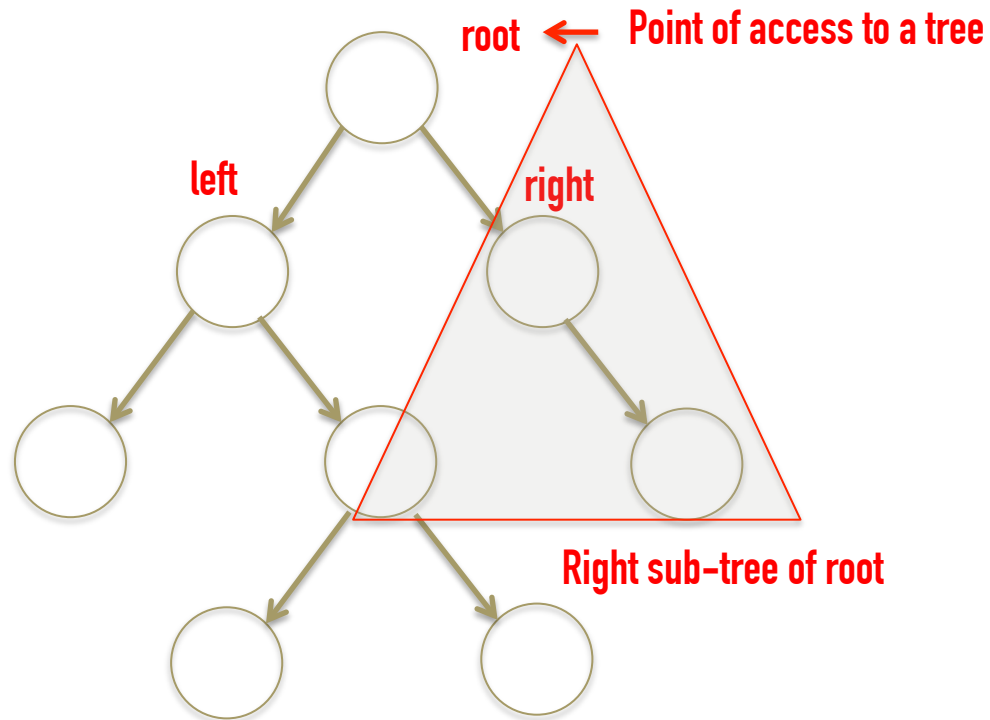
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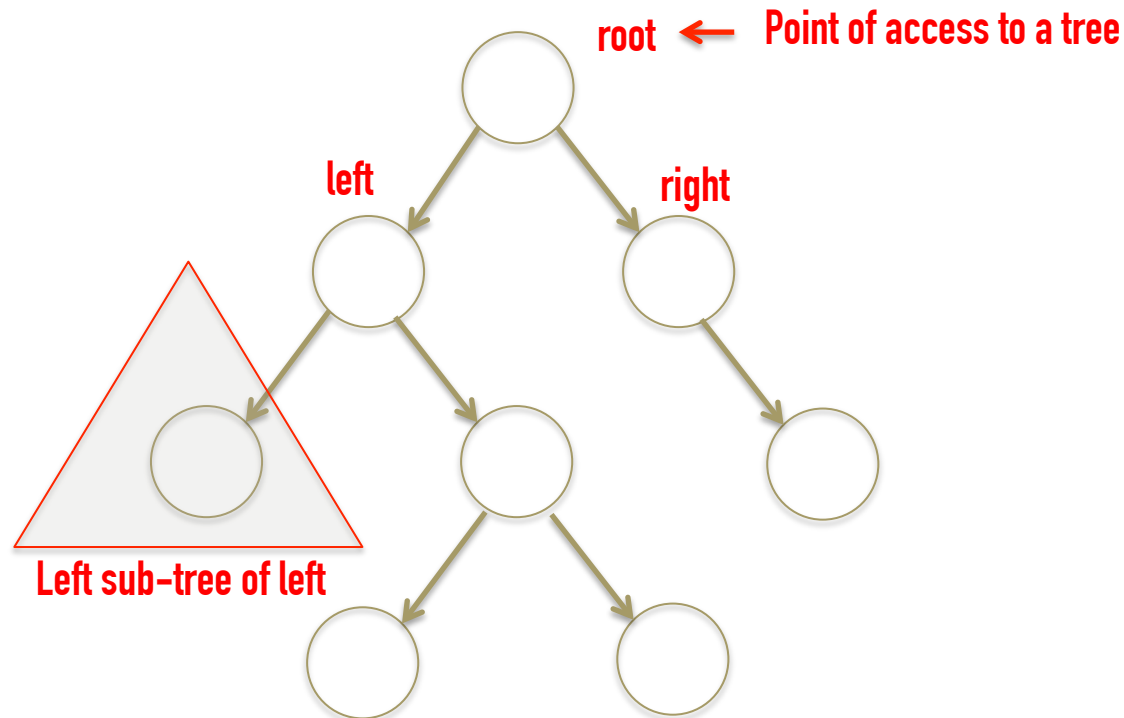
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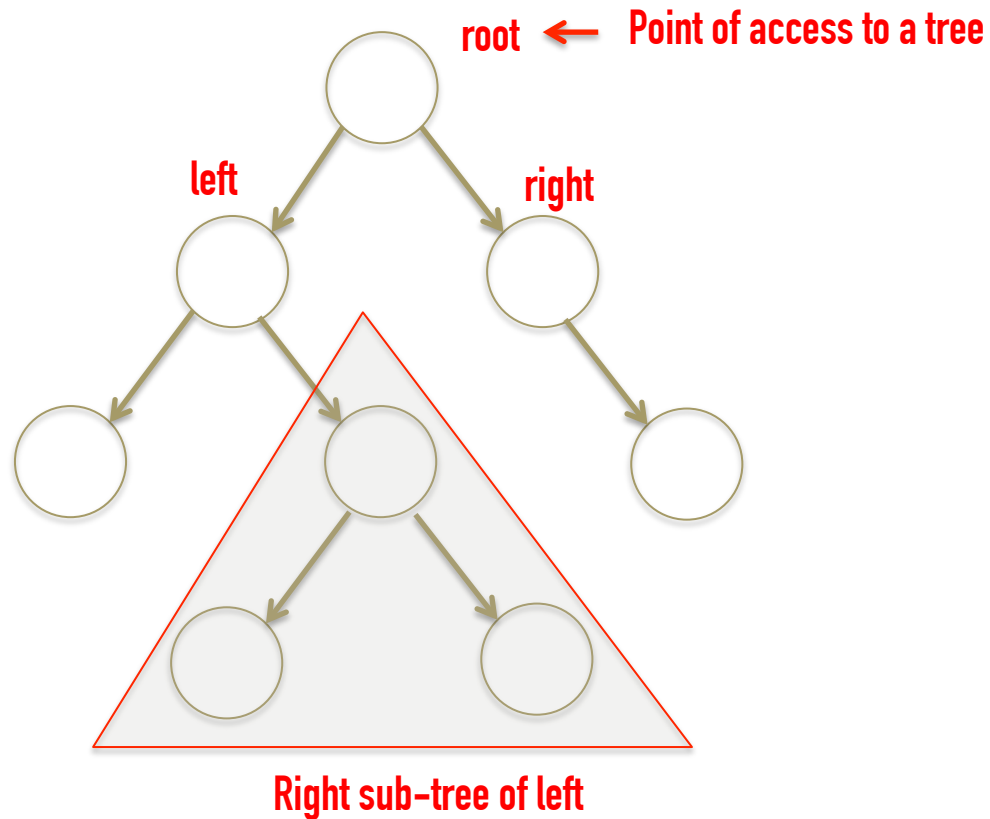
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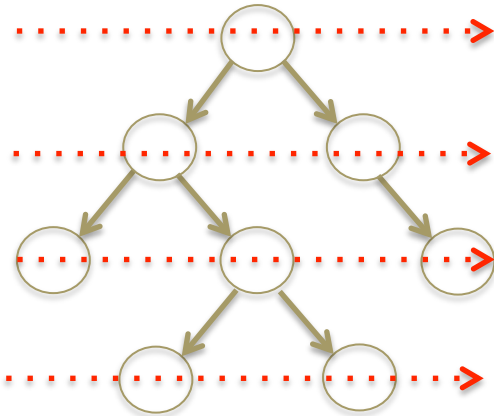
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Traversing a tree

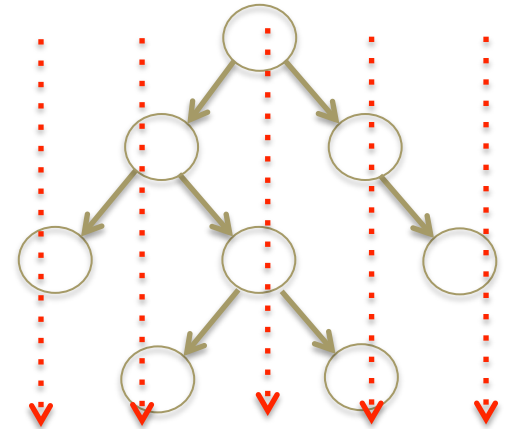
Traversal:
the process of visiting **all the nodes** of a tree

Breadth-First
Traversal



“reading the tree”
(in the western world)

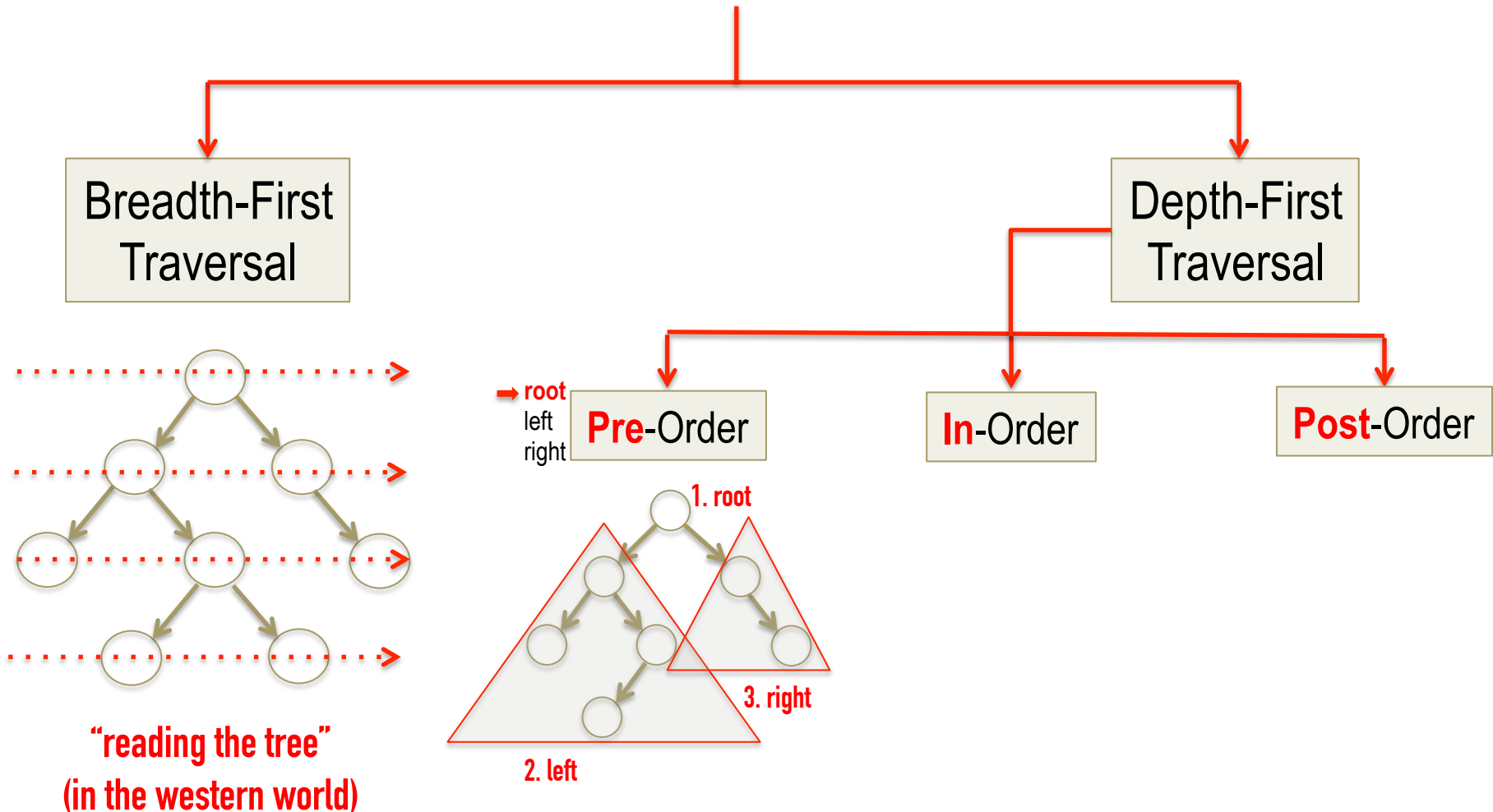
Depth-First
Traversal



“diving the tree”

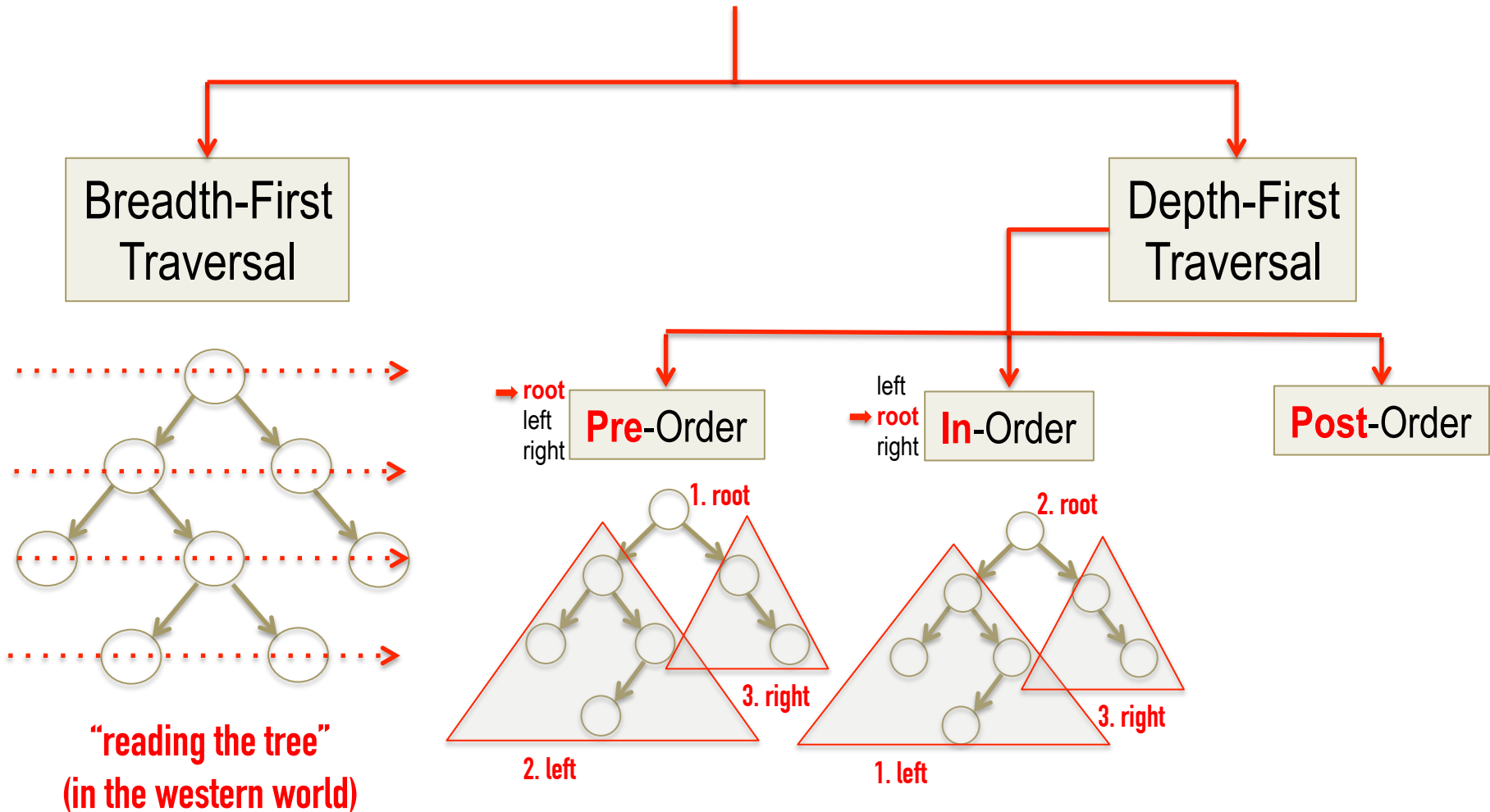
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