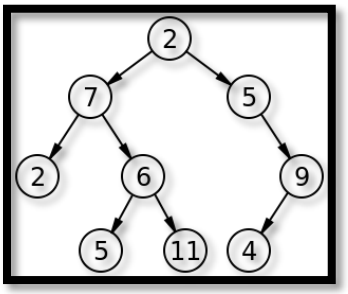
**Tree (Data Structure) Terminology**




A simple unordered tree; in this diagram, the node labeled 7 has two children, labeled 2 and 6, and one parent, labeled 2. The root node, at the top, has no parent.

**Root:** The top node in a tree.

**Child:** A node directly connected to another node when moving away from the Root.

**Parent:** The converse notion of a child.

**Siblings:** A group of nodes with the same parent.

**Descendant:** A node reachable by repeated proceeding from parent to child.

**Ancestor:** A node reachable by repeated proceeding from child to parent.

**Leaf:** (less commonly called External node) A node with no children.

**Branch: (Internal node)** A node with at least one child.

**Degree:** The number of sub trees of a node.

**Edge:** The connection between one node and another.

**Path:** A sequence of nodes and edges connecting a node with a descendant.

**Level:** The level of a node is defined by 1 + (the number of connections between the node and the root).

**Height of node:** The height of a node is the number of edges on the longest path between that node and a leaf.

**Height of tree:** The height of a tree is the height of its root node.

**Depth:** The depth of a node is the number of edges from the tree's root node to the node.

**Forest:** A forest is a set of $n \geq 0$ disjoint trees