

Diagram illustrating the structure of the $4-3$ 12-65 tree, showing the root node and its children, and further branching into sub-trees.

The root node is labeled $4-3$ 12-65. It branches into four children:

- Left child: $1-2$ (labeled $4-3$ 12-65)
- Second child: $4-3$ (labeled $4-3$ 12-65)
- Third child: $2-3$ (labeled $4-3$ 12-65)
- Right child: $5-6$ (labeled $4-3$ 12-65)

The tree structure continues to branch into sub-trees, with labels indicating the specific configurations of the nodes. The diagram shows the hierarchical structure of the tree, with nodes labeled by their configuration (e.g., $4-3$ 12-65, $1-2$, $4-3$, $2-3$, $5-6$).