

Diagram illustrating the structure of the  $2-1-4-6-5-3$  tree, showing the root node and its children, and further branching into sub-trees.

The root node is  $2-1-4-6-5-3$ . It branches into four children:  $ROOT\ 2-1-4-6-5-3$ ,  $35DUP\ 2-1-4-6-5-3$ ,  $40DUP\ 2\ 3\ 5\ 6-4\ 1$ , and  $53DUP\ 2-1\ 5\ 6-4-3$ .

The  $ROOT\ 2-1-4-6-5-3$  node branches into three children:  $2-1$ ,  $2-3$ , and  $4-3$ .

The  $35DUP\ 2-1-4-6-5-3$  node branches into two children:  $4-5$  and  $4-3$ .

The  $40DUP\ 2\ 3\ 5\ 6-4\ 1$  node branches into two children:  $3-4$  and  $5-4$ .

The  $53DUP\ 2-1\ 5\ 6-4-3$  node branches into three children:  $2-1$ ,  $2-3$ , and  $5-4$ .

The diagram shows the hierarchical structure of the tree, with nodes labeled by their sequence of numbers. The branching structure is as follows:

- Root:  $2-1-4-6-5-3$ 
  - Child 1:  $ROOT\ 2-1-4-6-5-3$ 
    - Child 1.1:  $2-1$
    - Child 1.2:  $2-3$
    - Child 1.3:  $4-3$
  - Child 2:  $35DUP\ 2-1-4-6-5-3$ 
    - Child 2.1:  $4-5$
    - Child 2.2:  $4-3$
  - Child 3:  $40DUP\ 2\ 3\ 5\ 6-4\ 1$ 
    - Child 3.1:  $3-4$
    - Child 3.2:  $5-4$
  - Child 4:  $53DUP\ 2-1\ 5\ 6-4-3$ 
    - Child 4.1:  $2-1$
    - Child 4.2:  $2-3$
    - Child 4.3:  $5-4$