

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

The root node is labeled  $3-2-1-6-5-4$ . It branches into four children:

- Left child:  $3-2-6-1-5-4$  (labeled **ROOT**)
- Second child:  $3-2-1-6-5-4$  (labeled **17DUP**)
- Third child:  $3-2-1-6-5-4$  (labeled **3-2-1-6-5-4**)
- Right child:  $3-2-1-6-5-4$  (labeled **3-2-1-6-5-4**)

The diagram shows further branching of these sub-trees, with labels indicating the structure of the resulting nodes. The labels are as follows:

- Under **ROOT**:  $3-2$  and  $4-5$
- Under **17DUP**:  $1-2$ ,  $4-3$ , and  $4-5$
- Under the third child:  $3-2$  and  $4-5$
- Under the right child:  $3-2$ ,  $3-4$ , and  $1-2$

The diagram continues to show further branching of these sub-trees, with labels indicating the structure of the resulting nodes. The labels are as follows:

- Under **ROOT**:  $6-5$ ,  $4-3$ , and  $4-5$
- Under **17DUP**:  $3-2$ ,  $3-4$ , and  $6-5$
- Under the third child:  $4-3$ ,  $4-5$ ,  $2-1$ , and  $1-2$
- Under the right child:  $4-3$ ,  $4-5$ ,  $3-2$ ,  $3-4$ ,  $1-2$ ,  $2-1$ , and  $3-2$

The diagram continues to show further branching of these sub-trees, with labels indicating the structure of the resulting nodes. The labels are as follows:

- Under **ROOT**:  $1-2$ ,  $4-3$ , and  $4-5$
- Under **17DUP**:  $5-6$ ,  $6-5$ ,  $6-5$ , and  $5-6$
- Under the third child:  $3-2$ ,  $3-4$ , and  $1-2$
- Under the right child:  $4-3$ ,  $4-5$ ,  $2-1$ ,  $1-2$ ,  $2-1$ ,  $1-2$ ,  $2-1$ , and  $3-2$

The diagram continues to show further branching of these sub-trees, with labels indicating the structure of the resulting nodes. The labels are as follows:

- Under **ROOT**:  $4-3$  and  $4-5$
- Under **17DUP**:  $2-1$ ,  $1-2$ ,  $2-1$ ,  $1-2$ ,  $1-2$ ,  $2-1$ ,  $1-2$ ,  $2-1$ , and  $3-2$
- Under the third child:  $3-2$  and  $3-4$
- Under the right child:  $4-3$  and  $4-5$