Skip - List

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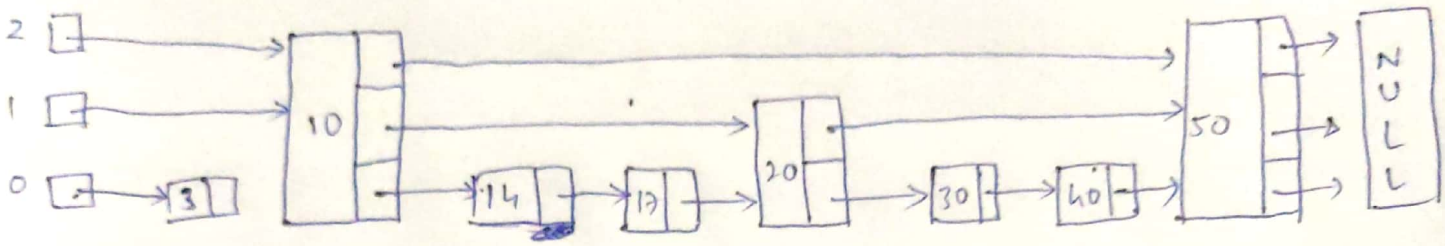
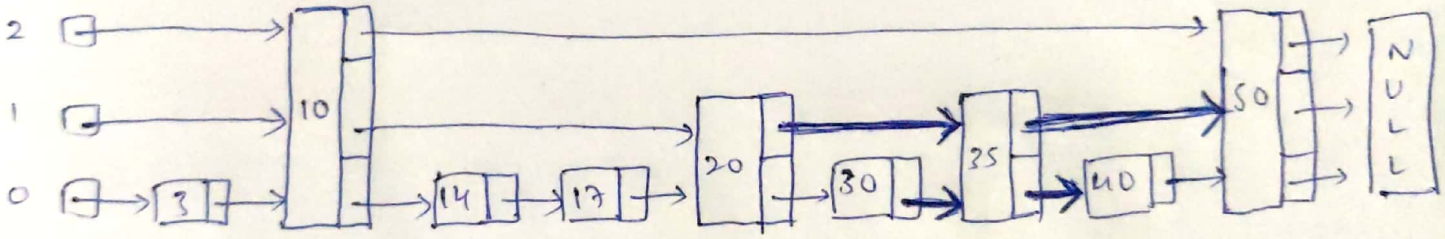
Original skip list →



skip list insertion →

Inserting 35



35 is in between 30 and 40 hence lets insert it at level 1.

To insert 35 at level 1 4 pointer manipulations are required.

20 → next at level 1 should point to node 35 30 → next should point to node 35 35 → next at level 1 should point to node 50, at last 35 → next at level 0 should point to node 40.

These are the pointer manipulations alone to insert a node.

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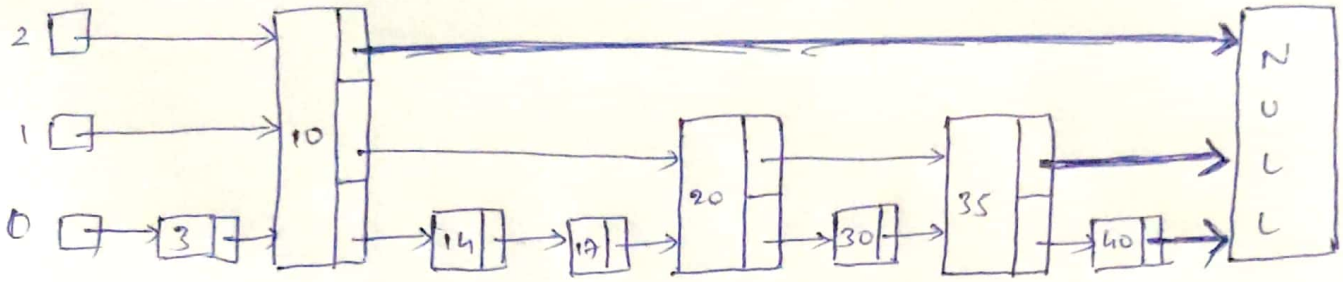
Deleting node 50



To remove node 50 all the pointer pointing to node 50 should point to next node of 50.

(1) node 10 at level 2 which pointed at node 50 should now point node next to 50 which is NULL.

(2) node 35 at level 1 which pointed at node 50 level 1 should now point to NULL.

(3) node 40 at level 0 which pointed at node 50 at level 0 should now point to NULL.

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