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Towards a Dynamic Optimal Alphabetic Tree

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ABSTRACT

We propose an algorithm to insert into or delete from a weighted binary alphabetic tree in **linear-time** keeping the tree optimal after insertion or deletion.We show that both insertion and deletion of a node can be done in $O(n)$ time provided its weight is not bigger than the higher weight of its two neighbouring nodes.
 Key Words : Optimal alphabetic trees, insertion and deletion, linear time alphabetic trees.