



Self-Balancing Trees - AVL Tree



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As you have learned during the lectures and exercises, trees are important data structures which are used for many different applications. One problem of trees is, however, that they might *degenerate* and thus lose many of their advantages. A data structure that prevents this is the **AVL tree**.

AVL-Tree

1. Explain, what an *AVL tree* is! Why is it necessary to balance trees?
2. Explain the algorithm for inserting node into an *AVL tree* using the sequence **14, 17, 19, 7, 5, 10, 18**.
3. Show how the tree looks like after every important step.

Be prepared to demonstrate the algorithm on another sequence in class!



Template files

Get all files in an archive [templates.zip](#) or [templates.tgz](#) .

[AVLTree.md](#)

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