

Binary Search Trees

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1 Introduction

A binary search tree is a data structure where each node contains

- key
- satellite data
- **left** child pointer
- **right** child pointer
- **p** parent pointer

It has the following property:

- Let x be a node in a binary search tree. If y is a node in the left subtree of x , then $y.key \leq x.key$. If y is a node in the right subtree of x , then $x.key \leq y.key$.

2 Deletion the Most Interesting Operation

The code (look at the slides) can be explained graphically:



