

Lecture #24: Randomly Generated
Binary Search Trees
Lecture Presentation

Deterministic Quicksort

What Does It Do?

Assumption about Input Arrays

Why are Properties of “Randomly Constructed Binary Search Trees” Relevant?

What Can Be Established?

A Randomized Quicksort Algorithm

What Does This Algorithm Do Instead?

Why are Properties of “Randomly Constructed Binary Search Trees” Relevant?

What Can Be Established?

What Can Go Wrong if Array Entries are Not Distinct?

Assumptions, and Their Impact