Algorithms and Data Structure: Contents

4 Stacks

1. what does a stack do?
2. LIFO
3. stacks implemented as arrays
4. implementation variants

5 Queues

1. what does a queue do?
2. FIFO
3. fixed size queues as ring buffer

6 Abstract Data Types

1. which data structure for which task?

7 Recursion

1. binary search
2. and its complexity
3. recursion: `multall`, `quicksort` (cheat version)

8 Heap

1. heap
2. heaps as trees
3. heap condition
4. heaps as arrays (whose children are these anyway)?
5. heapify principle

9 Graphs

1. graph definitions/specification
2. Euler graphs, Euler condition, Euler cycles
3. topological sort

10 Dynamic Programming

1. principle of Dynamic Programming
2. alignment algorithm