

优先队列 (PriorityQueue)

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1. Stack - First In Last Out (FILO)
 - Array or Linked List
2. Queue - First In First Out (FIFO)
 - Array or Linked List

本节内容

1. Stack - First In Last Out (FILO)

- Array or Linked List

2. Queue - First In First Out (FIFO)

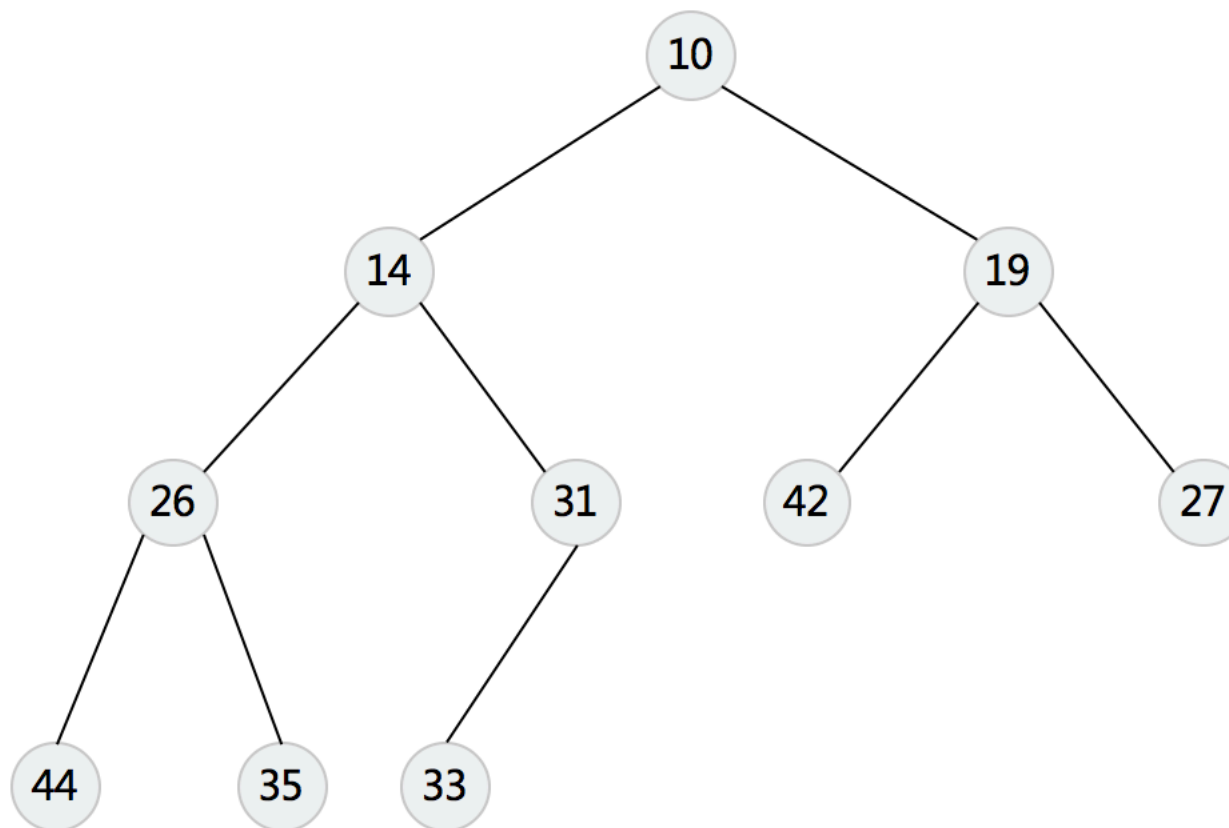
- Array or Linked List

3. PriorityQueue - 优先队列

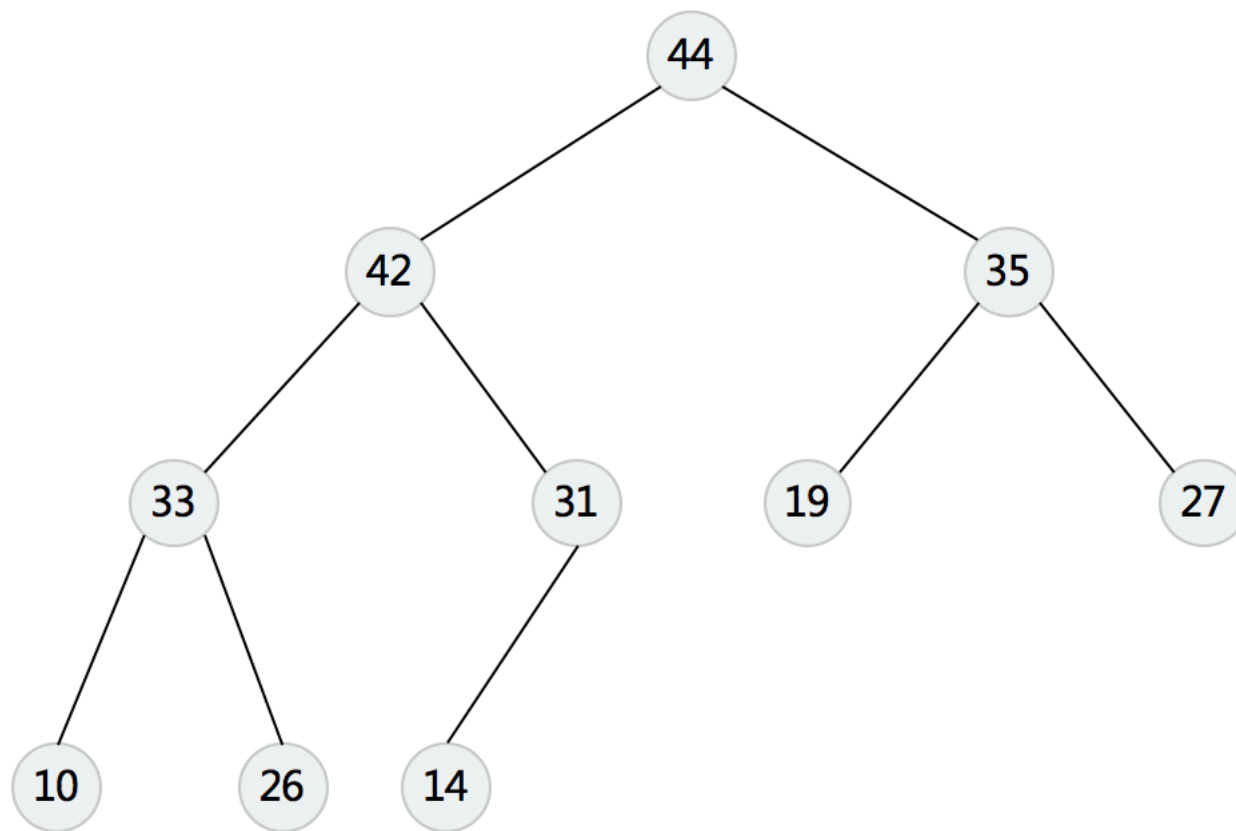
- 正常入、按照优先级出

1. Heap (Binary, Binomial, Fibonacci)
2. Binary Search Tree

Mini Heap



Max Heap



Heap Wiki

- [https://en.wikipedia.org/wiki/Heap_\(data_structure\)](https://en.wikipedia.org/wiki/Heap_(data_structure))
- Google 搜索 **heap** 或者 **堆**

Operation	Binary ^[7]	Leftist	Binomial ^[7]	Fibonacci ^{[7][8]}	Pairing ^[9]	Brodal ^{[10][b]}	Rank-pairing ^[12]	Strict Fibonacci ^[13]	2-3 heap
find-min	$\Theta(1)$	$\Theta(1)$	$\Theta(\log n)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$?
delete-min	$\Theta(\log n)$	$\Theta(\log n)$	$\Theta(\log n)$	$O(\log n)^{[c]}$	$O(\log n)^{[c]}$	$O(\log n)$	$O(\log n)^{[c]}$	$O(\log n)$	$O(\log n)^{[c]}$
insert	$O(\log n)$	$\Theta(\log n)$	$\Theta(1)^{[c]}$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$O(\log n)^{[c]}$
decrease-key	$\Theta(\log n)$	$\Theta(n)$	$\Theta(\log n)$	$\Theta(1)^{[c]}$	$o(\log n)^{[c][d]}$	$\Theta(1)$	$\Theta(1)^{[c]}$	$\Theta(1)$	$\Theta(1)$
merge	$\Theta(n)$	$\Theta(\log n)$	$O(\log n)^{[e]}$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$	$\Theta(1)$?

实战题目

1. <https://leetcode.com/problems/kth-largest-element-in-a-stream/discuss/149050/Java-Priority-Queue>
2. <https://leetcode.com/problems/top-k-frequent-words/description/>