



DATA STRUCTURES II

▶ *heapify demo*

Lecture slides by Kevin Wayne

<http://www.cs.princeton.edu/~wayne/kleinberg-tardos>

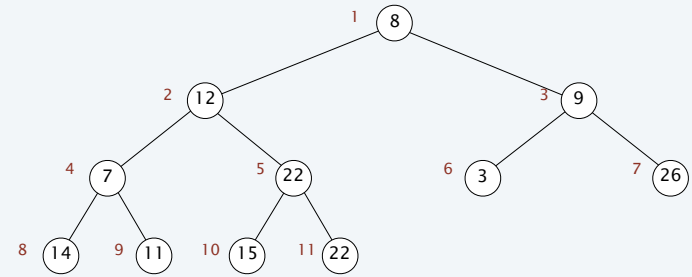
Last updated on 7/25/17 11:07 AM

Heapify demo

Heapify. For each element in reverse-array order, sink it down.

we assume array entries are indexed 1 to n

array in arbitrary order

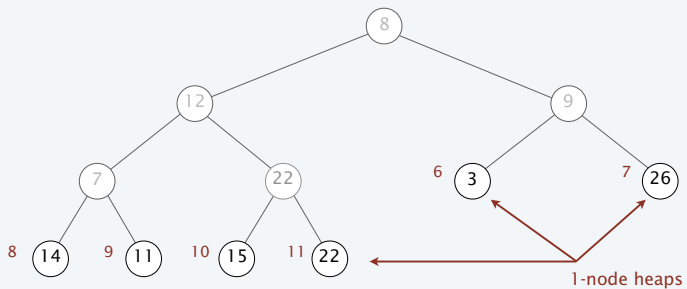


8	12	9	7	22	3	26	14	11	15	22
1	2	3	4	5	6	7	8	9	10	11

2

Heapify demo

Heapify. For each element in reverse-array order, sink it down.



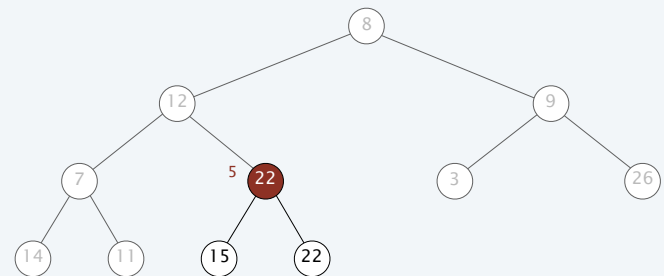
8	12	9	7	22	3	26	14	11	15	22
					6	7	8	9	10	11

3

Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 5



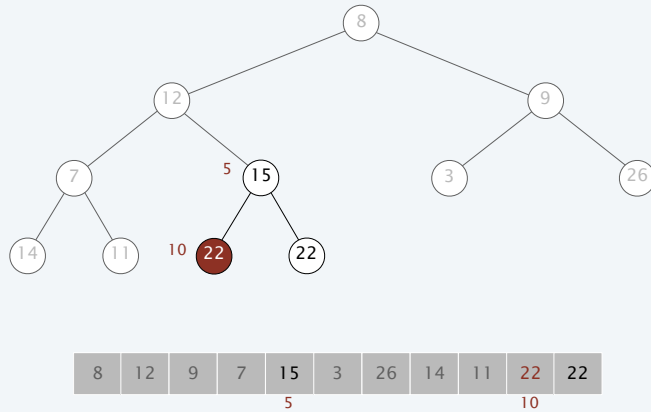
8	12	9	7	22	3	26	14	11	15	22
				5						

4

Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 5

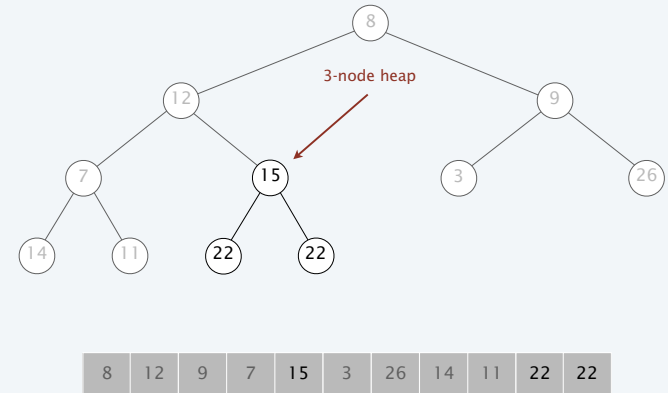


5

Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 5

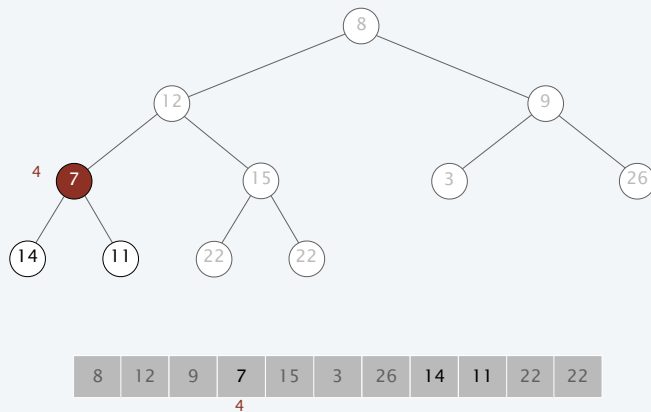


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 4

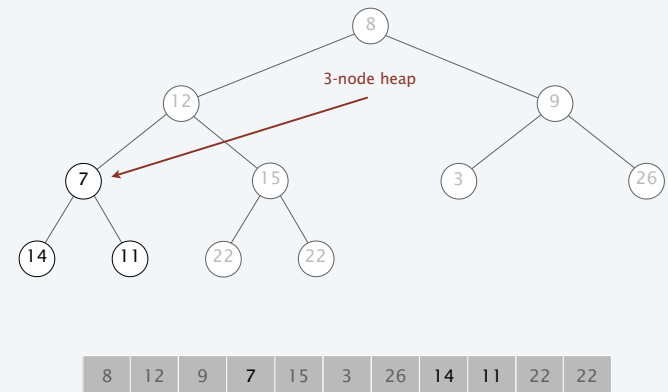


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 4

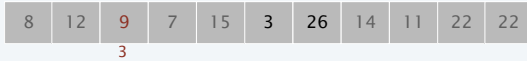
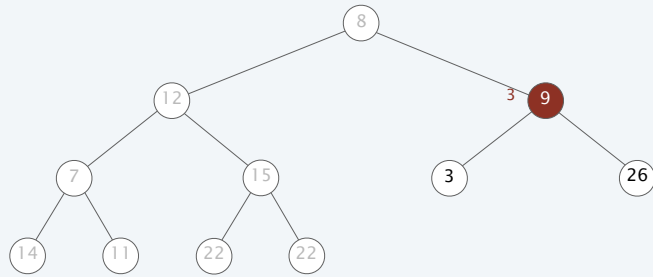


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 3

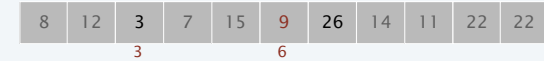
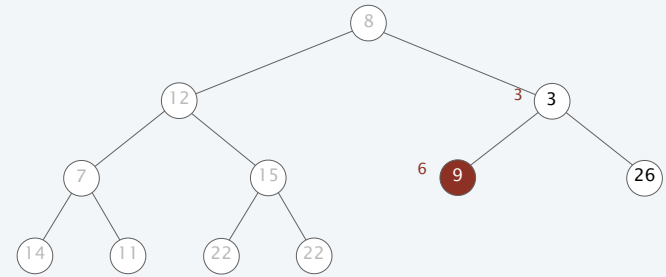


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 3

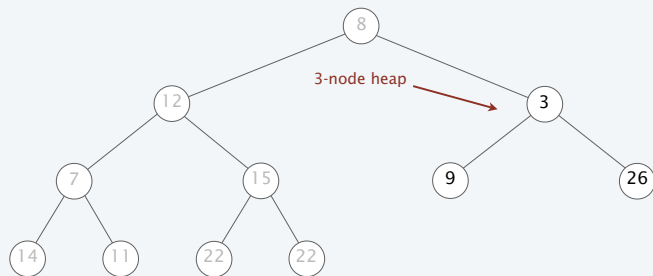


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 3

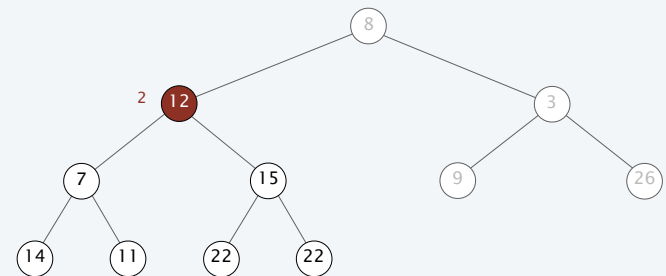


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 2

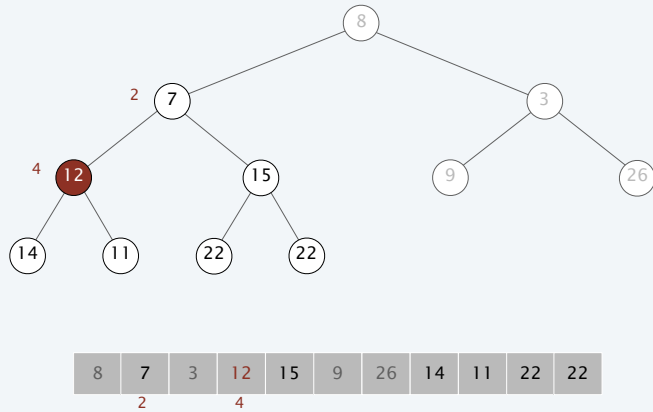


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 2

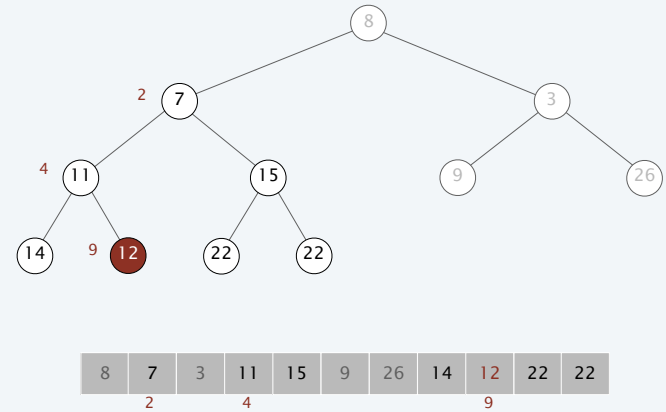


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 2

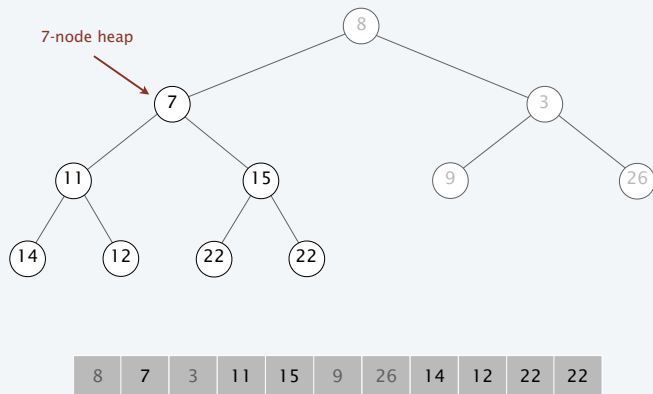


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 2

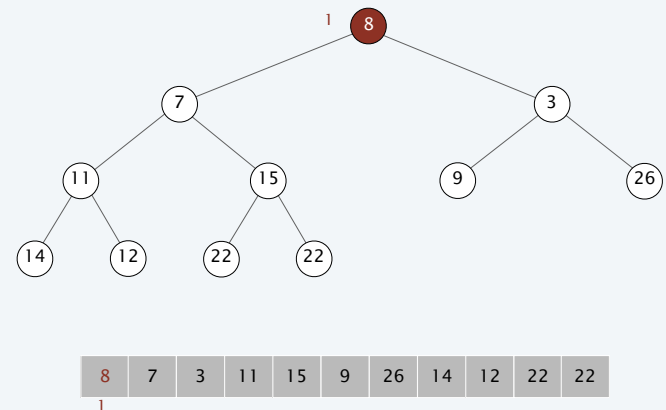


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 1

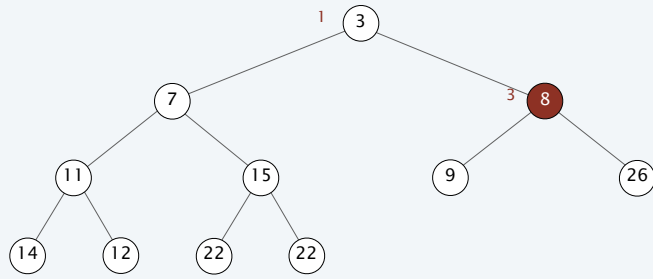


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

sink 1

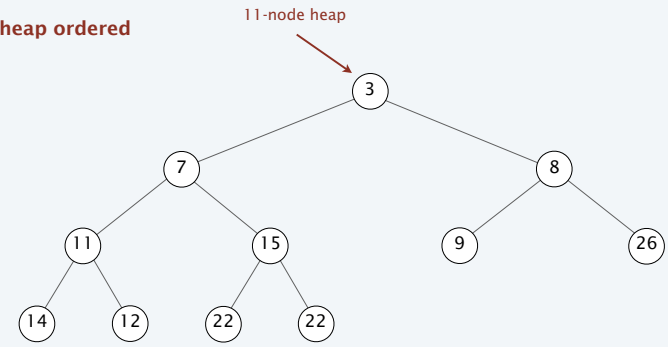


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Heapify demo

Heapify. For each element in reverse-array order, sink it down.

array is heap ordered



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