Lecture 11
Heaps
Exercises ANS

Department of Computer Science
Hofstra University

Acknowledgement: Lecture slides based on UofW Course on Data Structures

Q1. Min-heap

Consider the following sequence of numbers: 18, 2, 42, 49, 32, 1, 0. Build a binary min-heap with these numbers in two ways.

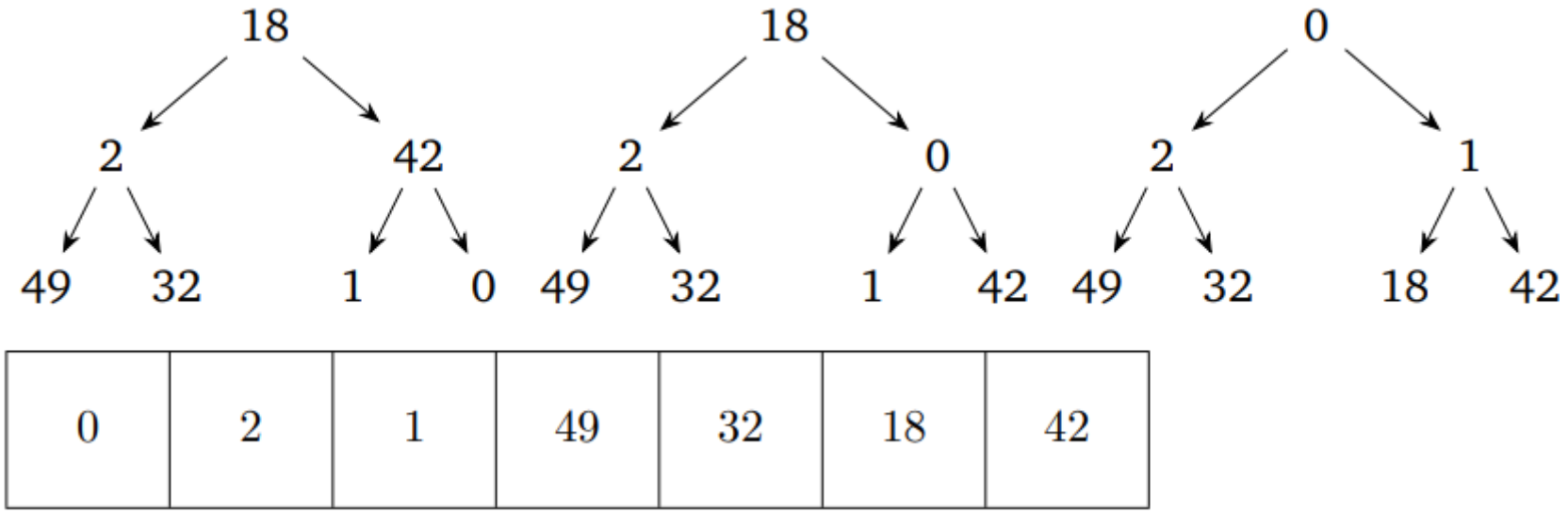
(a) Use Floyd's build-heap to build the heap. Draw the heap before and after each percolation. At the end, draw the array representation of the final heap.

(b) Build the heap using repeated insertions (in the order given: 18, 2, 42, 49, 32, 1, 0) - draw the heap after each insertion. At the end, draw the array representation of the final heap.

Q1. Min-heap ANS

Consider the following sequence of numbers: 18, 2, 42, 49, 32, 1, 0. Build a binary min-heap with these numbers in two ways.

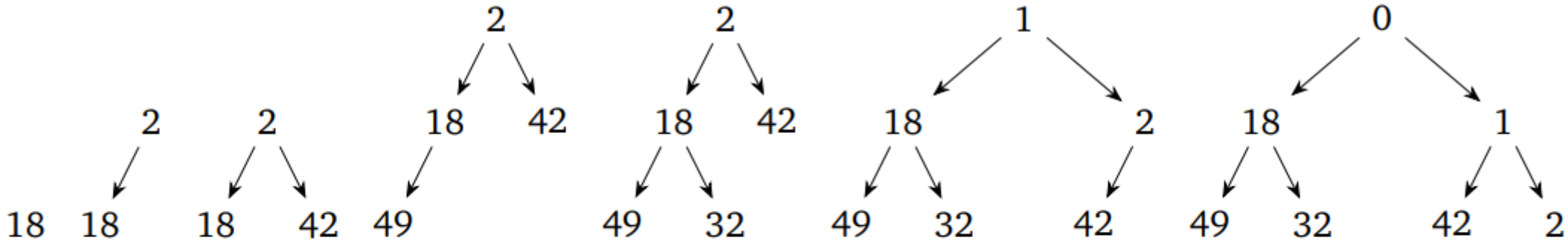
(a) Use Floyd's build-heap to build the heap. Draw the heap before and after each percolation. At the end, draw the array representation of the final heap.



Q1. Min-heap ANS

Consider the following sequence of numbers: 18, 2, 42, 49, 32, 1, 0. Build a binary min-heap with these numbers in two ways.

(b) Build the heap using repeated insertions (in the order given: 18, 2, 42, 49, 32, 1, 0) - draw the heap after each insertion. At the end, draw the array representation of the final heap.



0	18	1	49	32	42	2