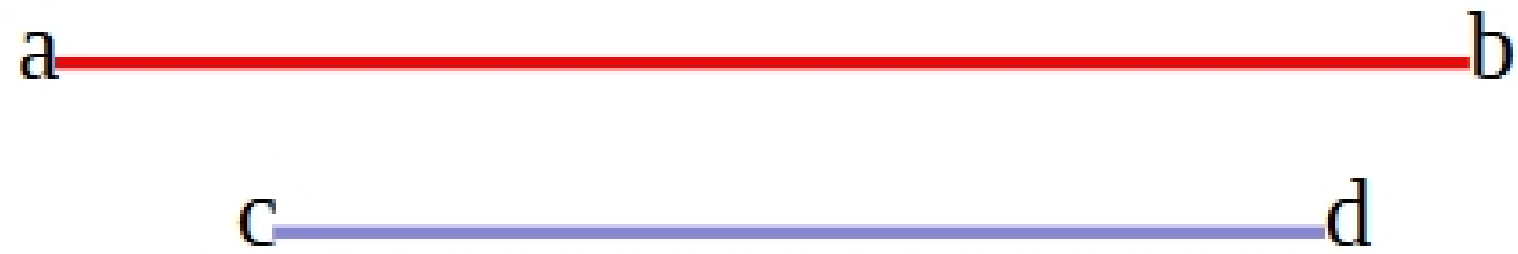


Interval Heaps

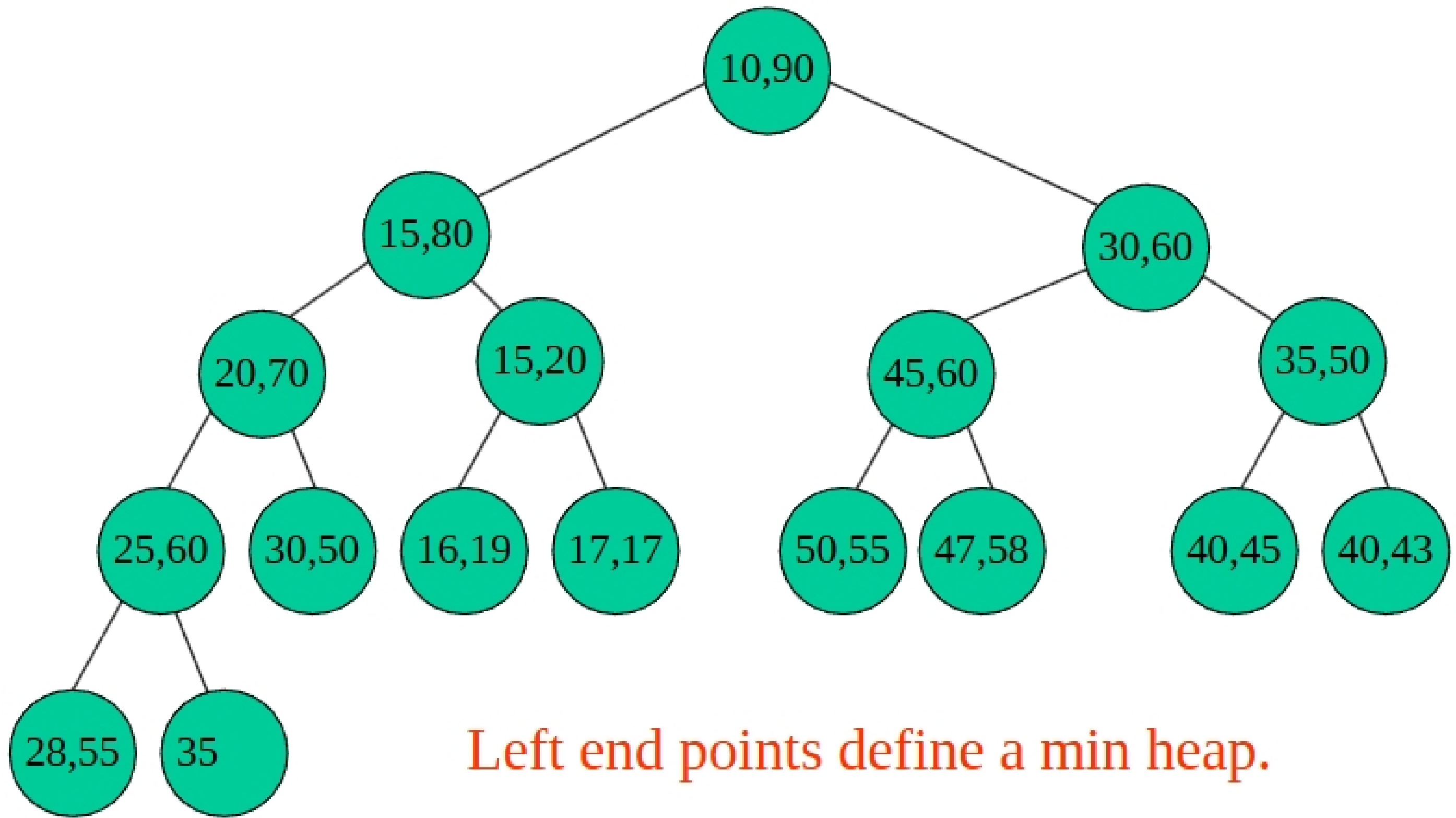
- Complete binary tree.
- Each node (except possibly last one) has 2 elements.
- Last node has 1 or 2 elements.
- Let a and b be the elements in a node P , $a \leq b$.
- $[a, b]$ is the interval represented by P .
- The interval represented by a node that has just one element a is $[a, a]$.
- The interval $[c, d]$ is contained in interval $[a, b]$ iff $a \leq c \leq d \leq b$.
- In an interval heap each node's (except for root) interval is contained in that of its parent.

Interval



- $[c, d]$ is contained in $[a, b]$
- $a \leq c$
- $d \leq b$

Example Interval Heap



Left end points define a min heap.

Right end points define a max heap.