

6.1-7.

Show that, with the array representation for storing an n -element heap, the leaves are the nodes indexed by $\lfloor n/2 \rfloor + 1, \lfloor n/2 \rfloor + 2, \dots, n$.

Proof.

The last non-leaf node is the parent of index n , which has its index $i = \lfloor n/2 \rfloor$. All the nodes subsequent to it are leaves, and thus indexed by $\lfloor n/2 \rfloor + 1, \lfloor n/2 \rfloor + 2, \dots, n$. \square

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