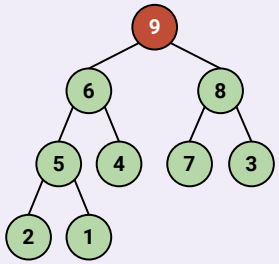
Q Removing the Max

Draw the binary max-heap after removing the max value.



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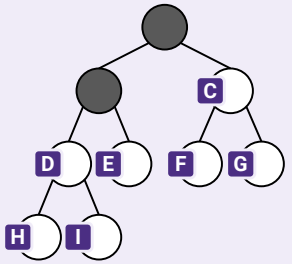
Q1: Draw the binary max-heap after removing the max value.

Q Third-Largest Value

If the second-largest value in a max-heap is the root's left child, select all nodes where the **third-largest value** could be found. Assume all values are distinct.



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Q1: If the second-largest value in a max-heap is the root's left child, select all nodes where the **third-largest value** could be found. Assume all values are distinct.

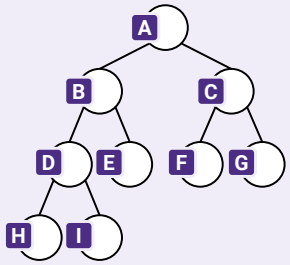
Q Decreasing Order

If 9 distinct values are inserted into this max-heap in **decreasing order**, which nodes could represent the following?

Largest value

Median value

Smallest value



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?: Draw the result of inserting 3, 2, 1 into an empty max-heap.

If 9 distinct values are inserted into this max-heap in **decreasing order**, which nodes could represent the following?

Q1: Largest value

Q2: Median value

Q3: Smallest value

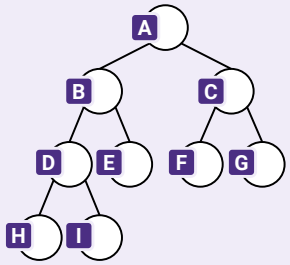
Q Unknown Order

If 9 distinct values are inserted into this max-heap in an **unknown order**, which nodes could represent the following?

Largest value

Median value

Smallest value



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If 9 distinct values are inserted into this max-heap in an **unknown order**, which nodes could represent the following?

Q1: Largest value

Q2: Median value

Q3: Smallest value