**Note:**

* *Root is at index 0 in array.*
* *Left child of i-th node is at (2\*i + 1)th index.*
* *Right child of i-th node is at (2\*i + 2)th index.*
* *Parent of i-th node is at (i-1)/2 index.*

***Last non-leaf node****= parent of last-node.  
or, Last non-leaf node = parent of node at (n-1)th index.  
or, Last non-leaf node = Node at index ((n-1) – 1)/2 = (n/2) – 1.*

*Array = {1, 3, 5, 4, 6, 13, 10, 9, 8, 15, 17}  
Corresponding Complete Binary Tree is:*

*1  
              /     \  
           3         5  
        /    \     /  \  
      4      6   13  10  
     / \    / \  
   9   8  15 17*

***The task to build a Max-Heap from above array****.*

*Total Nodes = 11.  
Last Non-leaf node index = (11/2) – 1 = 4.  
Therefore, last non-leaf node = 6.*

*To build the heap, heapify only the nodes: [1, 3, 5, 4, 6] in reverse order.*

***Heapify 6****: Swap 6 and 17.*

*1  
              /     \  
           3         5  
        /    \      /  \  
     4      17   13  10  
    / \    /  \  
  9   8  15   6*

***Heapify 4****: Swap 4 and 9.*

*1  
              /     \  
           3         5  
        /    \      /  \  
     9      17   13  10  
    / \    /  \  
  4   8  15   6*

***Heapify 5****: Swap 13 and 5.*

*1  
              /     \  
           3         13  
        /    \      /  \  
     9      17   5   10  
    / \    /  \  
 4   8  15   6*

***Heapify 3****: First Swap 3 and 17, again swap 3 and 15.*

*1  
             /     \  
        17         13  
       /    \      /  \  
    9      15   5   10  
   / \    /  \  
 4   8  3   6*

***Heapify 1****: First Swap 1 and 17, again swap 1 and 15, finally swap 1 and 6.*

*17  
              /      \  
          15         13  
         /    \      /  \  
       9      6    5   10  
      / \    /  \  
    4   8  3    1*