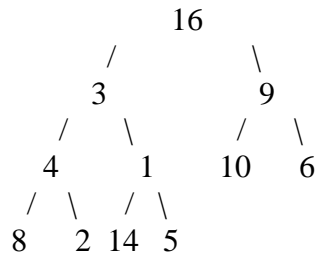


## 2) (10 pts) ALG (Binary Heaps)

Consider running the Make Heap/Heapify algorithm on the following set of random values (shown stored in a heap structure) to convert it to a min heap. In doing so, exactly six swaps will occur between adjacent values in the heap. When the algorithm concludes, the structure will be valid minheap. Draw the structure of the tree after (a) the first three swaps have completed, and (b) when the Make Heap algorithm completes (the final valid minheap). Here is the initial tree drawing of the values:



(a) Draw the minheap here after completing the first three swaps.

(b) Draw the final minheap.