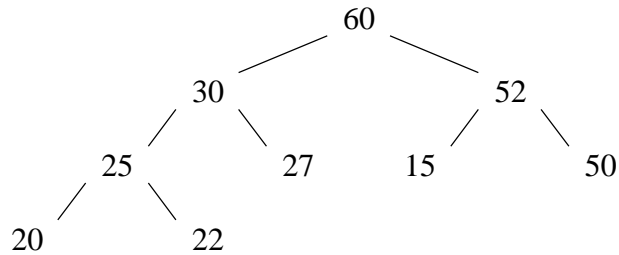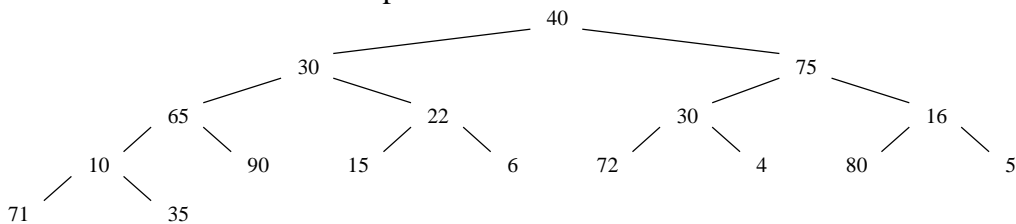# CPSC 316 HOMEWORK ASSIGNMENT: HEAPS

1. This exercise inserts and deletes elements in the max-heap below. Sequentially execute the given sequence of operations. Use the result of the previous operation as you execute each part of the exercise. Draw the modified heap at the conclusion of each operation.

   a. delete
   b. insert 35
   c. insert 65
   d. delete
   e. delete
   f. insert 5

2. Recursively "heapify" the following tree from the bottom up to create a min-heap. Show each intermediate step.

3. Trace the in-place heapsort for an array with elements {7,12,5,2,15,25,1}. Show each intermediate step.