

## CSCI 204 Introduction to Heap Activity Prof Meng

Student name(s):

1. Build 2 heaps, one maximum heap and the other minimum heap, by using the following sequence of numbers, 8, 15, 6, 10, 7, 4, 12. Show each step of the work.
  - a. Max heap:
  - b. Min heap:

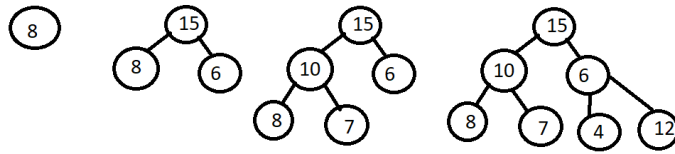


Figure a. Max Heap

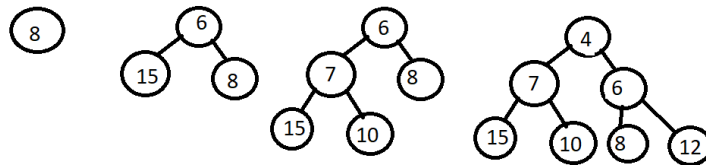


Figure b. Min Heap

2. In both cases above (min and max heap), perform the delete heap operation (remove the root) consecutively until the heap is empty. What do you see as the results?
  - a. 15, 12, 10, 8, 7, 6, 4 this is a sorted list in descending order.
  - b. 4, 6, 7, 8, 10, 12, 15 this is a sorted list in ascending order.