

Debugging with Heaps and Trees:

Assume there is a toString method that prints out the contents of the underlying array for a minimum heap. Given the outputs below, which of the following are valid minimum heaps?

Array contents, beginning at index 0:
null 1 25 3 41 57 4 19

Array contents, beginning at index 0:
1 6 4 5 9 12 17 18 26

Array contents, beginning at index 0:
null 1 6 4 9 12 5 7 14 11 16 18 8

```
public String toString() {  
    String s = "";  
    for(int i=0; i <  currentSize; i++) {  
        s += storage[i] + " ";  
    }  
    return s;  
}
```

<= for 1-based heap

Given the following output from pre-order and in-order tree traversals,
construct the corresponding tree:

pre-order tree traversal output:

20 35 12 9 3 45 16 17 2 1 4 8

in-order tree traversal output:

12 35 3 9 20 16 45 1 2 4 17 8

Is there a strategy we can use to help us do this?