

Heaps

4-16-2012

Opening Discussion

- Do you have any questions about the quiz?
- Minute essay comments:
 - What does Manifest do?
 - Why not use a binary tree for a binary heap?
 - Traversing heaps?
 - Takes more writing to show building a binary heap.
 - Which is more important, concepts or code?

Heaps as Arrays

- The tree structure is nice for visualizing the heap, but it is extremely inefficient for implementation.
- If we order the nodes starting at 1 you will see nice mathematical relationships between parents and children. We use this numbering as an index into a array and store the heap in an array or an array based list.

Code

- Let's write a binary heap.

Minute Essay

- Questions?