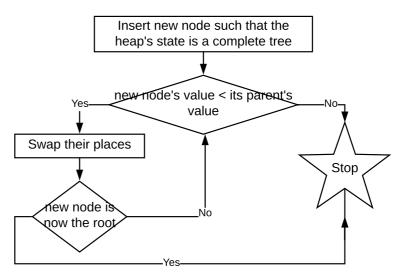Coiffe - Alexia Leong, Lynne Wang, Lily Yan
APCS2 pd1
HW48 -- Heap o'Trouble
2018-05-13

Adding to a heap:

```
Insert new node such that the
heap's state is a complete tree
        |
        v
new node's value < its parent's value
  Yes <-----             -----> No
        |                        |
        v                        v
Swap their places              Stop
        |                        ^
        v                        |
new node is now the root --No--> |
  |                              |
  Yes -----------------------------
```

Removing the min value from a heap:

```
Store the value of the min value to return later
        |
        v
Go to the rightmost leaf/last element and
make this element the new root, old root is
removed now
        |
        v
Is this value > than one of its children?
  Yes <-----                   -----> No
        |                               |
        v                               v
Swap their places              Return the original
        |                      root that you removed
        v
This new value is now the root
        |
        -------------> (back to "Is this value > ...")
```