

Name:

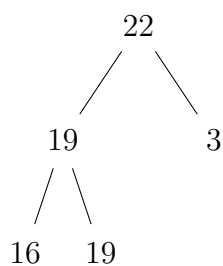
## Introduction to Programming in Python, I Semester, 2014–2015

### Quiz 5, 13 October 2014

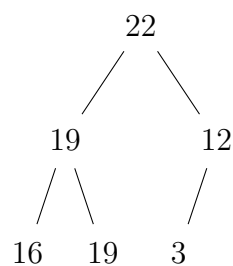
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Consider the max heap  $[22, 19, 3, 16, 19]$ , represented as a list.

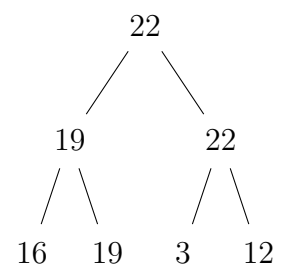
1. Draw the heap after inserting 12 and then 22. You do not have to explain each step or draw sub-steps, just draw the heap as it appears after each insertion is completed. *(5 marks)*



Initial heap

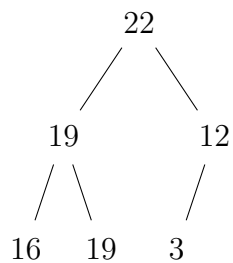


After inserting 12

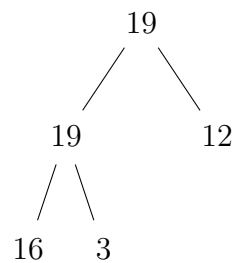


After inserting 22

2. Redraw the heap after *two* `deletemax` operations. *(5 marks)*



After first `deletemax`



After second `deletemax`

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*(Use reverse for rough work)*