Hi all,

Attached is the Tutorial 10 slides. As for maximum comparisons, the exact formula can be found here: <https://en.wikipedia.org/wiki/Binary_heap#Building_a_heap>

"The exact value of the above (the worst-case number of comparisons during the heap construction) is known to be equal to:

,[[9]](https://en.wikipedia.org/wiki/Binary_heap#cite_note-10)[[b]](https://en.wikipedia.org/wiki/Binary_heap#cite_note-11)

where *s*2(*n*) is the [sum of all digits of the binary representation](https://en.wikipedia.org/wiki/Hamming_weight) of *n* and *e*2(*n*) is the exponent of 2 in the prime factorization of *n*."

You can just work this out for a bunch of small values for the VA OQ.