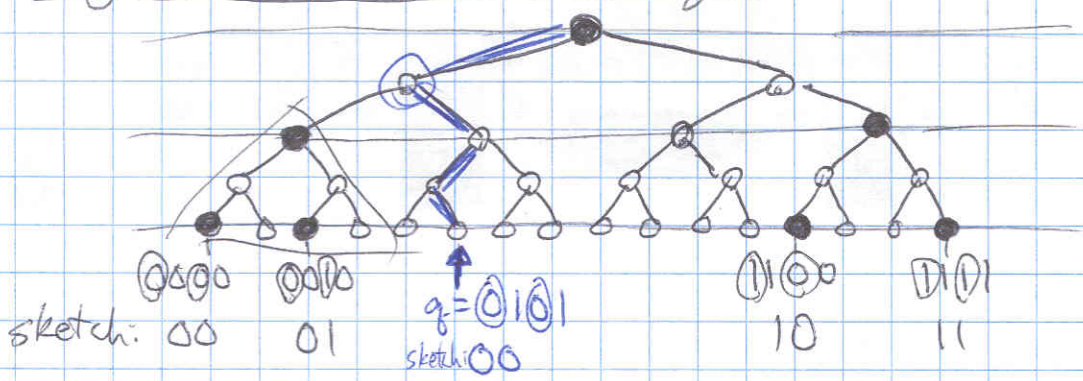
Why is sketch info enough?

6.897
L 4.4
Feb. 24, 2003



- find it fits at 00 (in general, between 2 sketches)
- take longest common prefix / lowest common ancestor of real elements (not sketch)
  (in general, among both near-matches)
  ↳ most significant 1-bit in XOR.
- this is where we "fell off" correct paths
- if we fix this first wrong bit, 0
  and set remaining bits to all 0's / all 1's
  we find the min/max in the subtree.
  ⇒ find either succ. or pred.
  via another query in sketch world

That finishes query!