

# Windowing Query

Vertical Segment Stabbing Query

- X-Segment Tree

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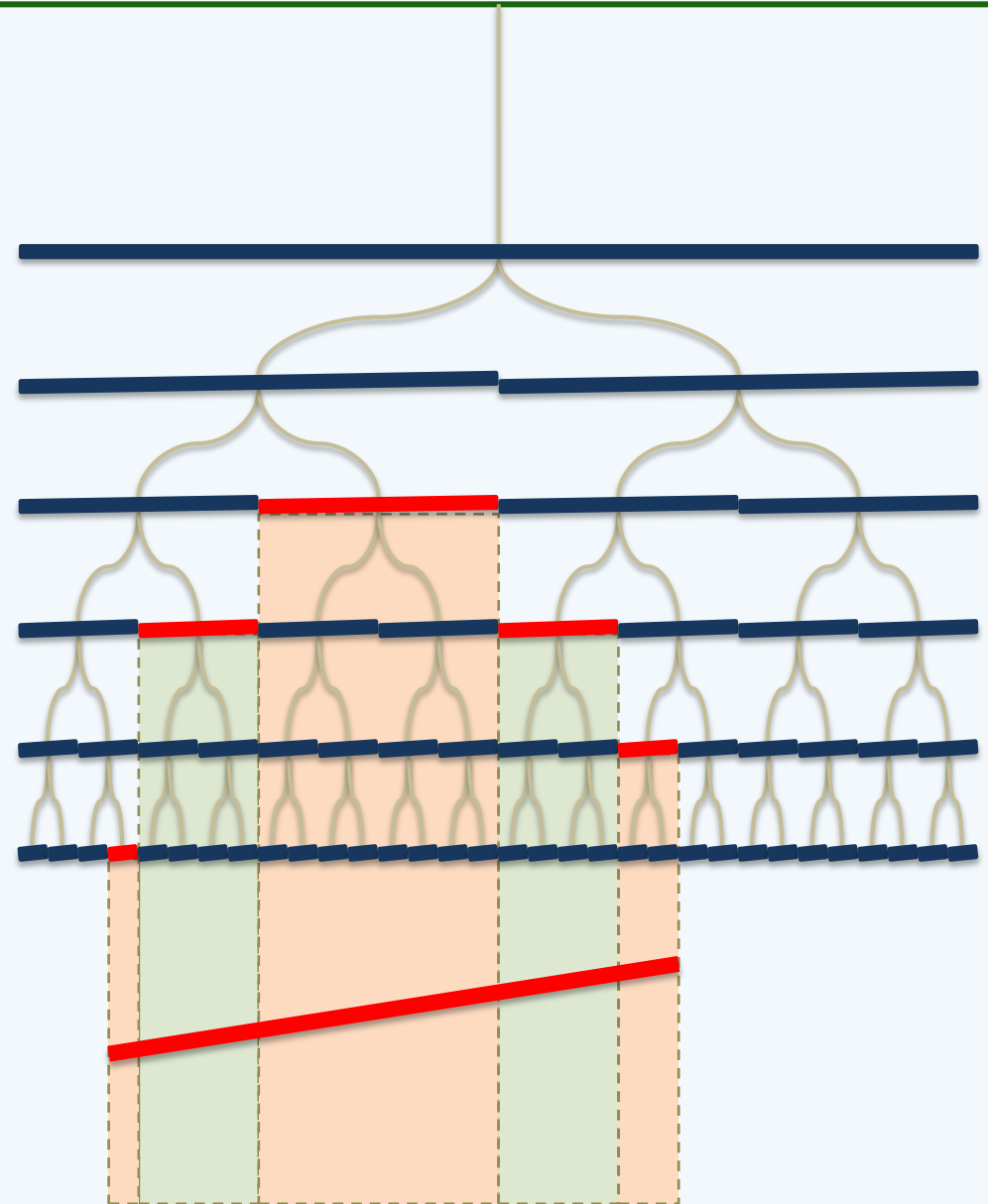
❖ Each node  $v$

corresponds to  
a vertical slab

$$EI(v) \times (-\infty, \infty)$$

❖ Each segment in  $\text{Int}(v)$

spans the slab



❖ We can now

- find in  $O(\log n)$  time  
 $O(\log n)$  canonical subsets
- whose union gives  
all intervals containing  $q_x$

❖ To pick out segments from each CS  
we need to do a  $y$ -range query

⌚ What kind of associative structure  
can be used to store each CS?

