

# Windowing Query

## Priority Search Tree

### - Construction

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## Construction

- ❖ The PST of size  $\mathcal{O}(n)$  can be constructed in  $\mathcal{O}(n \log n)$  time
- ❖ To construct a sub-heap for a subset
  - set its root to the point with the minimum x-coordinate
  - divide the other points into 2 subsets w.r.t the y-median
  - construct the 2 sub-heaps recursively
- ❖ If the points have been y-sorted,  $\mathcal{O}(n)$  time suffices

