Windowing Query

Grounded Range Query

- 2D-GRQ

Junhui DENG

deng@tsinghua.edu.cn

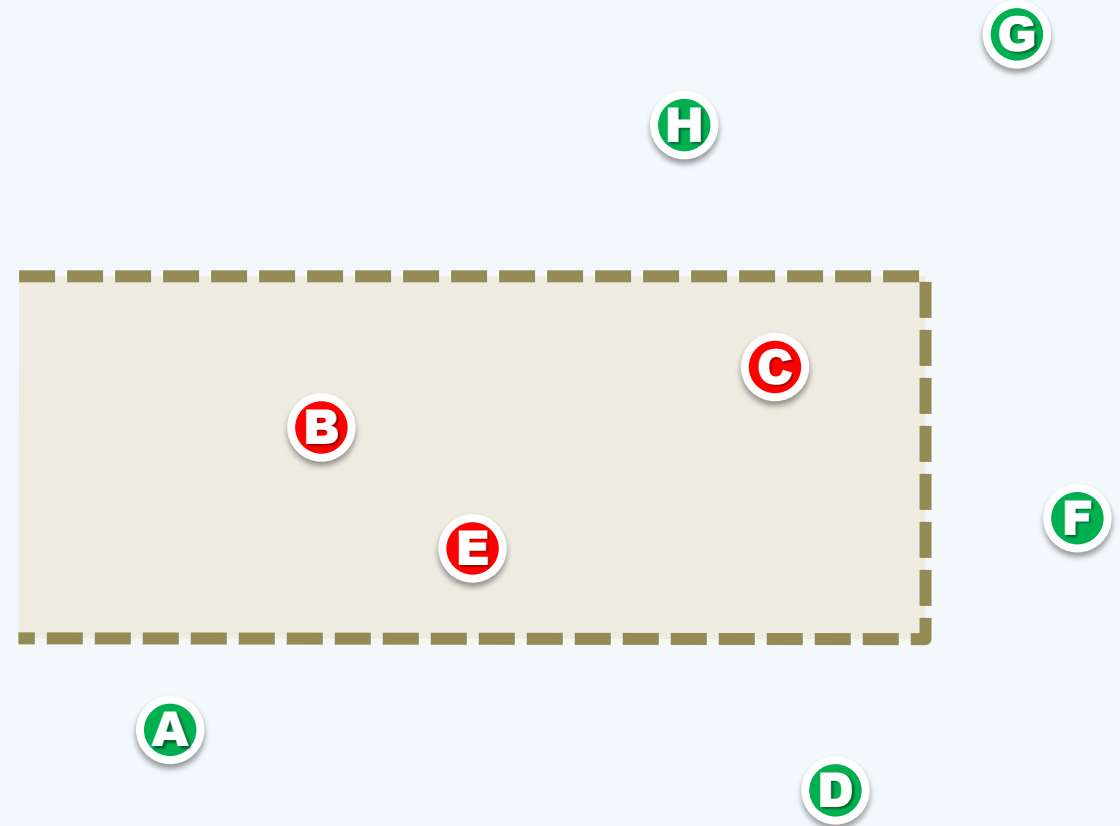❖ Given P a set of points in the plane:

P = { p_1, ..., p_n }

report all points that

fall in the "window"

W = $(-\infty, q_x] \times [q_y, q_y']$

👁 W is ⎡unbounded⎤ to the left

⧗ Can this fact be used to

speed up the query?

❖ Let's consider first

  its 1D version ...

❖ Given a sorted real set

  $X = \{ x_1, \ldots, x_n \}$,

  report all keys in $(-\infty, q_x]$