

## Windowing Query

Stabbing Query

- Vertical Stabbing Query

Junhui DENG

deng@tsinghua.edu.cn

## Input

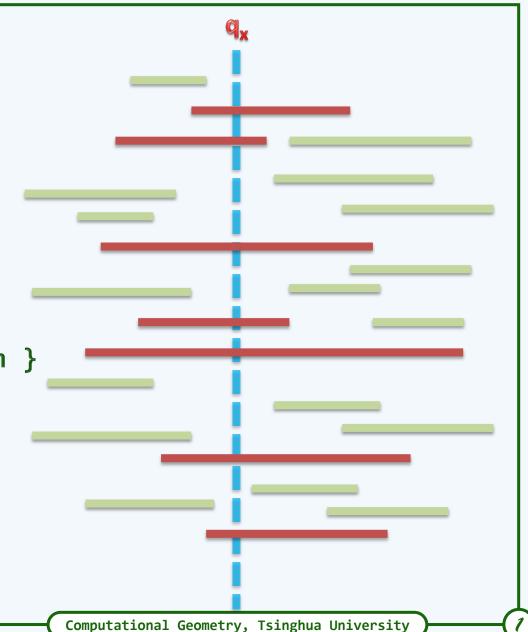
❖ A set of intervals

in general position

on the x-axis

$$S = \{ s_i = [x_i, x_i'] | 1 \le i \le n \}$$

❖ A query point: q<sub>x</sub>



## Output

 $\Leftrightarrow$  All intervals that contain  $q_x$ 

$$\{ s_i = [x_i, x_i'] \mid x_i \le q_x \le x_i'] \}$$

❖ To solve this query,

we will use

a structure named

interval tree ...

