

Windowing Query

Interval Tree: Construction

- Partitioning

Junhui DENG

deng@tsinghua.edu.cn

❖ All intervals can be then categorized into 3 subsets

$$S_{\text{left}} = \{ S_i \mid x_{i'} < x_{\text{mid}} \}$$

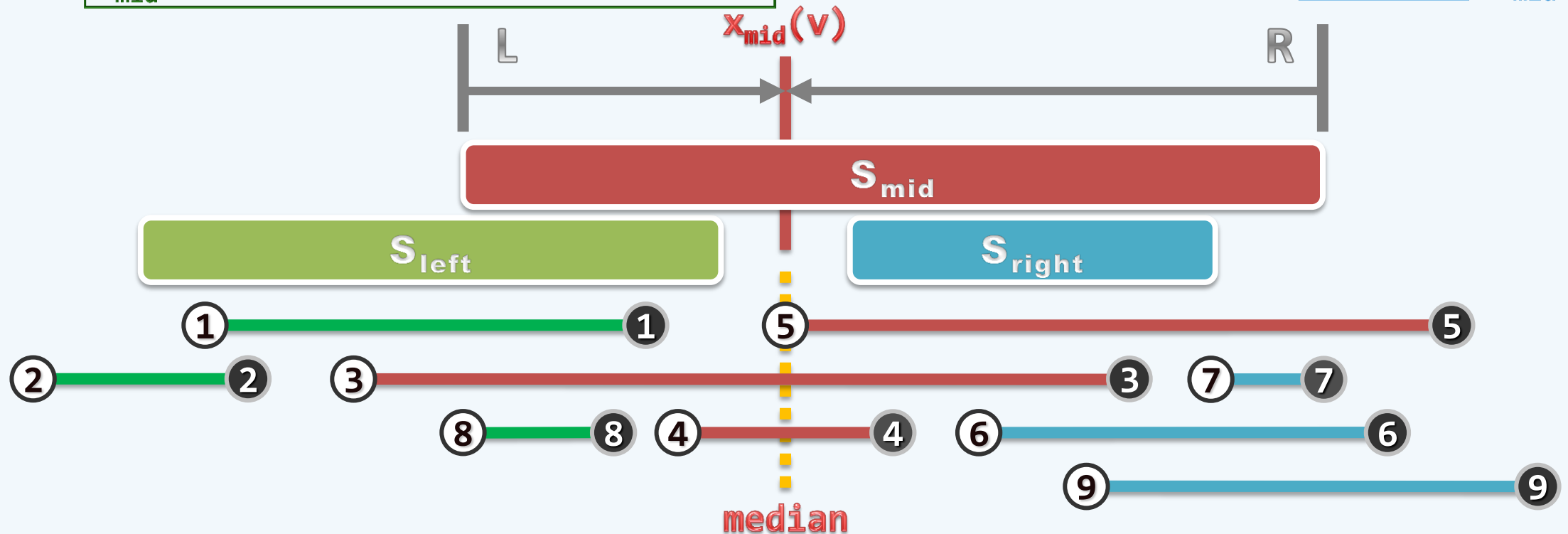
//intervals lying entirely **left** to x_{mid}

$$S_{\text{right}} = \{ S_i \mid x_{\text{mid}} < x_i \}$$

//intervals lying entirely **right** to x_{mid}

$$S_{\text{mid}} = \{ S_i \mid x_i \leq x_{\text{mid}} \leq x_{i'} \}$$

//intervals that **contain** x_{mid}



❖ $S_{\text{left/right}}$ will be recursively partitioned until they are empty (leaves)

