06-H-06

Point Location

Trapezoidal Map

- Search Structure: Performance

Junhui DENG

deng@tsinghua.edu.cn

- Each node of SS(S) corresponds to

  an entity (endpoint/segment/face)

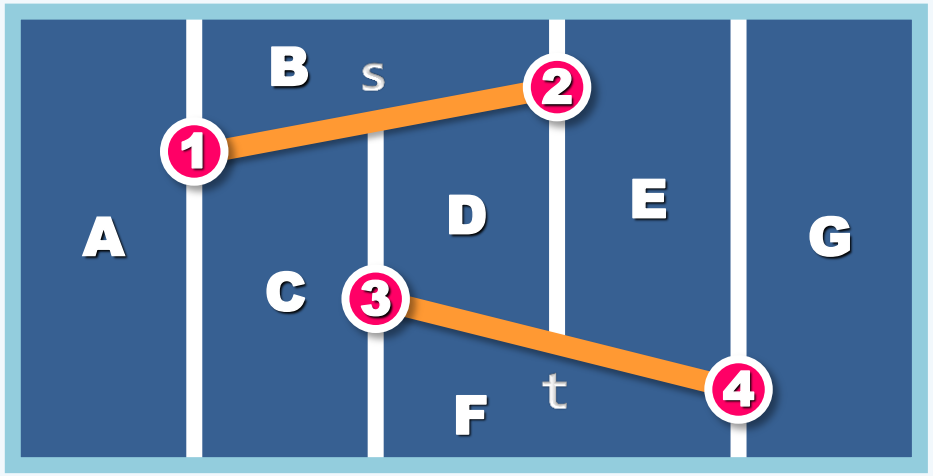
  of TM(S); but ...

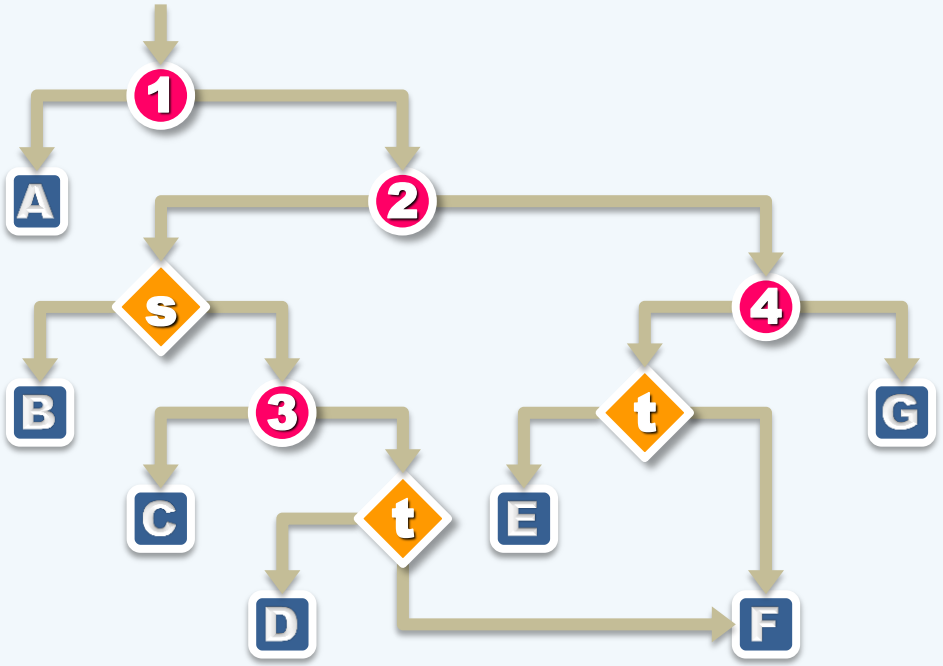
- Each entity of TM(S) may correspond to

  more than 1 node of SS(S); and

- There could only

  be duplications of y-nodes





- What is the size of SS(S) then?

  Does it still remain $O(n)$?

  Using SS(S),

  how long will a query be answered?

- We will see soon that

  the space and the query time

  will be $O(n)$ and $O(\log n)$ resp.,

  both in terms of expectation