

Binary Tree - optimized for searching

Node
↓
* data
* Left
* right

property:-

Right child $<$ root

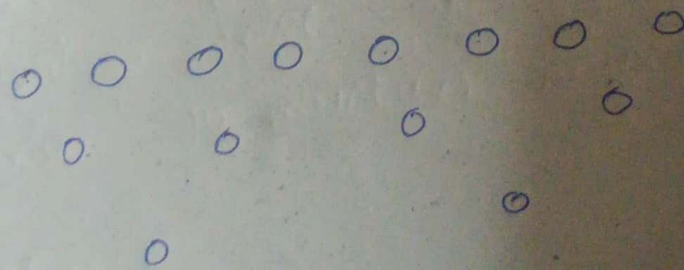
Left child $>$ root

⇒ At each step, it'll cut down the search time

≡ 9

Tennis Tournament

2 → 4 → 8 → 16 → 32



semi final

final

$F(256) \rightarrow 8$

$F(128) \rightarrow 7$

$F(64) \rightarrow 6$

$F(32) \rightarrow 5$

$\log(256)$
 $\log(2^8)$

$8 \log 2$

8