

DS & A

REVIEW

STACK

FILO (NOT DOWN)

LIFO

VOLATILE TRAVERSAL
- 1x

POP → TAKES FROM TOP & RETURN

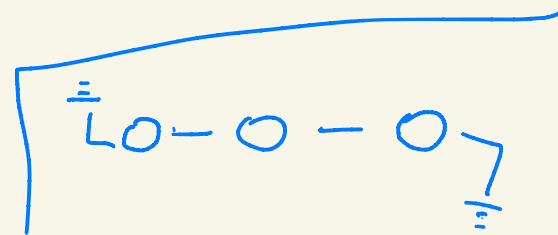
PUSH → ADDS TO TOP

PEEK → SEE / RETURN TOP

isEmpty → BOOL (1K TOP)

TRAVERSE : WHILE (! isEmpty() / PEEK()) {
 // WORK

}
RETURN



QUEUE

FIFO

UNOBTAINABLE TRAVERSAL

→ ENQUEUE → ADDS TO BACK

→ DEQUEUE → GETS FRONT

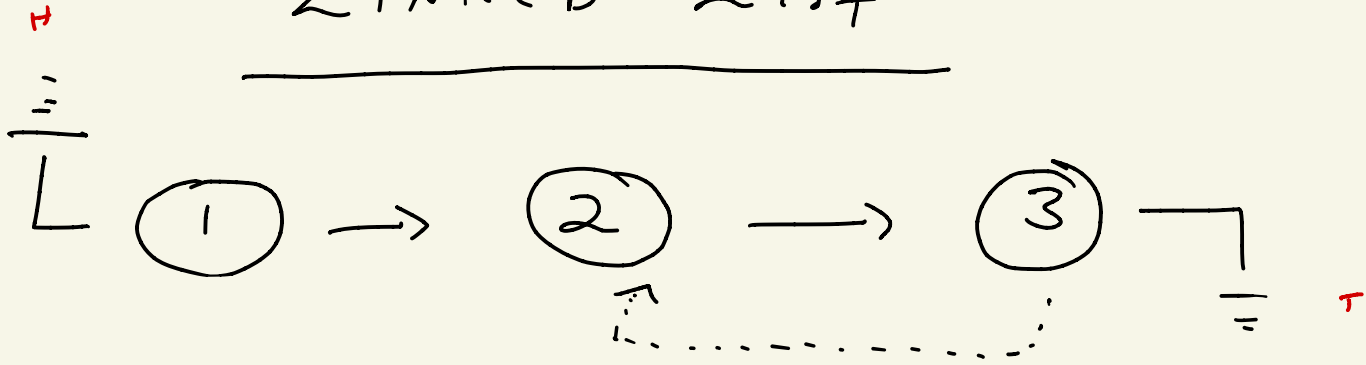
peek

isEmpty

TRAVERS - while (peek() / isEmpty) {

}

LINKED LIST



HEAD

NODES

- VALUE

- NEXT

TAIL

TRAVERSAL

WHILE (CURRENT / C. NEXT)

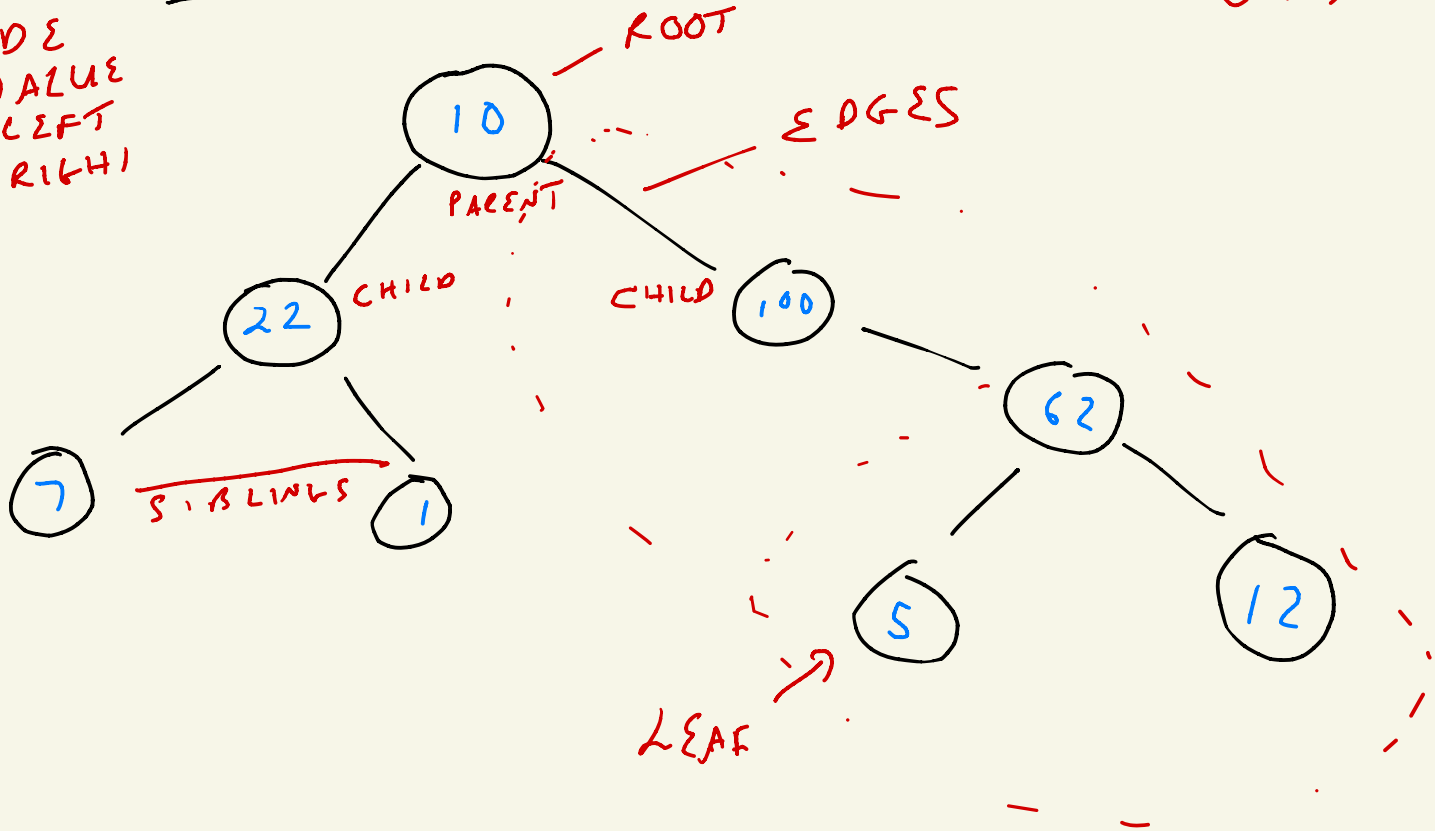
APPEND() → ADD NODE AT TAIL

PREFEND() / INSERT() → ADD NODE @ HEAD

TREES

FIND
T: $O(N)$

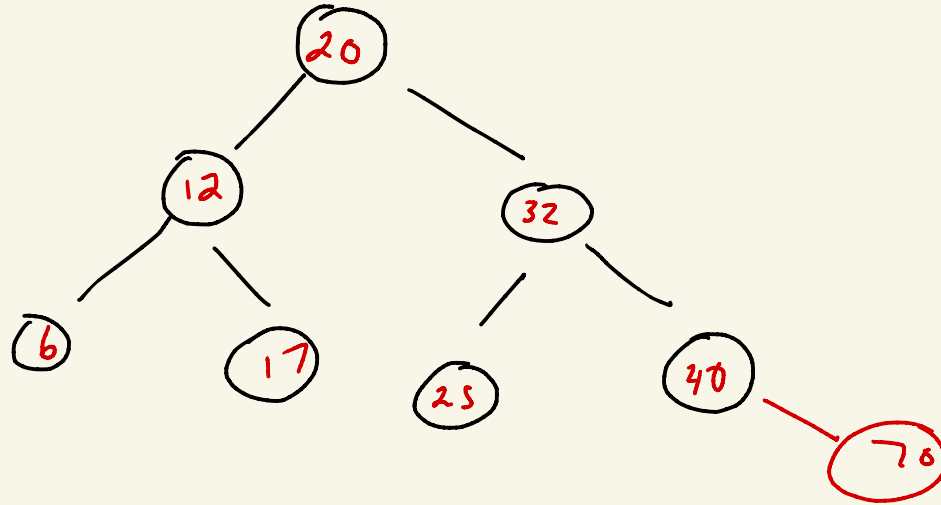
○ = NODE
· VALUE
· LEFT
· RIGHT



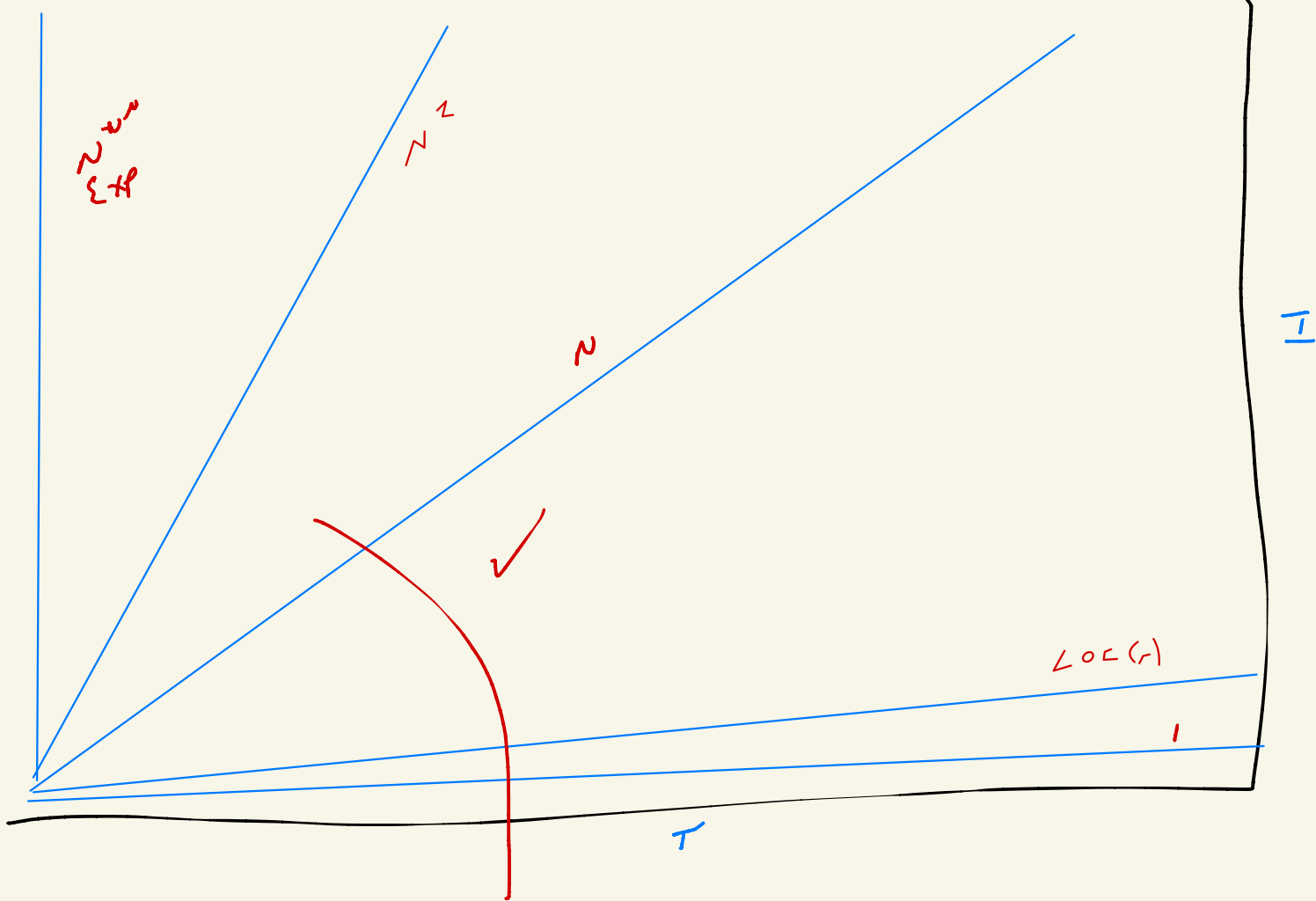
BINARY SEARCH TREE

LEFT = <

RIGHT = >

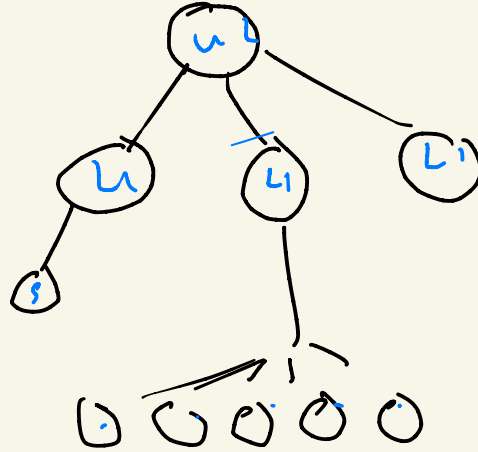


FIND:
 $O(\log_2 N)$



K-ARY

FILES



HTML

NOPE

VALUE

CHILDREN: []