

COP 3503 1/13

1 - TreeSet

2 - ArrayDeque

3 - Priority Queue (AddAll)

~~4 - ^{HashMap}TreeMap (election2)~~

~~5 - Hash~~

4 - TreeMap (election 3)

5 - HashSet (New: top25 will code)

6 - HashMap (election2)

Diameter upto 3×10^8 upto 10^5 cookies

Diam = D ID # = id

Code = $(D \ll 30) + id$

Store in a long

In general to store (x, y) you can

store it as $x \# n + y$, if

$0 \leq y < n$.

Drawback to Array List :

$O(n)$ delete middle

$O(n)$ insert middle

Array Deque allows

$O(1)$ add front, add end
del front, del end

Stack, Queue

Tree Map

Stores "pairs" KEY $\rightarrow$ VALUE

(Dictionary entries.)

Arup $\rightarrow$ 1112223333

Jasmine $\rightarrow$ 5552223333

In a tree map, the keys are sorted!

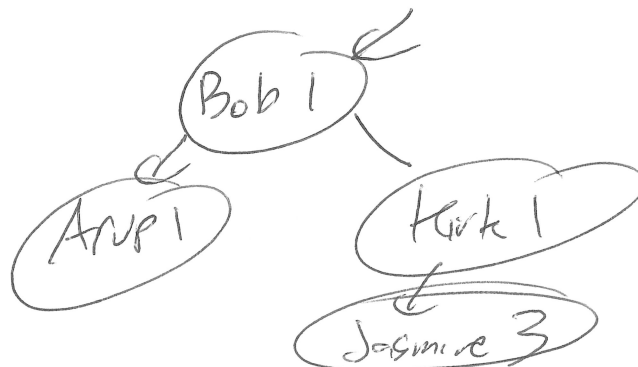
votes
ARUP
BOB
✓ JASMINE
✓ JASMINE
✓ JASMINE
✓ KIRK

ARUP $\rightarrow$ 1

BOB $\rightarrow$ 1

JASMINE $\rightarrow$ 2 3

KIRK $\rightarrow$ 1



① Array Deque

② PQ (add all)

③ Tree Map (election 3)

④ Hash Set ~~(election 3)~~ top 25

⑤ Hash Map (election 2)