Class 3

Sunday, September 12, 2021 8:40 PM

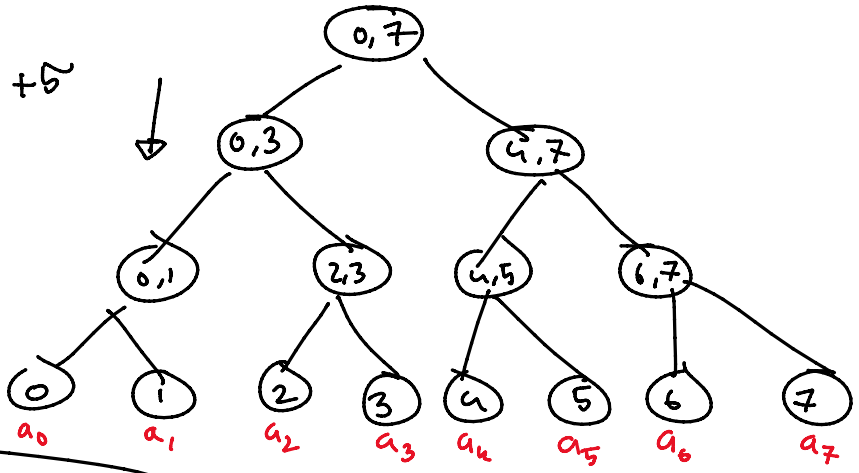
SegTree – Lazy propagation

1) SegTree → point update, range query } O(logN)

→ range update & query → O(logN)

update → [0,3] → +5

sum → [2,6]



Range sum tree

int tree[4N+5]

int lazy[4N+5]

lazy[nd] != 0

tree[nd] += (en-st+1) × lazy[nd]

$a_2 + a_3 + a_4 + a_5 + a_6$

5 5

lazy[nd+nd] += lazy[nd]

lazy[nd+nd+1] += lazy[nd]

lazy[nd] = 0

```
void update(----)
{
    pushDown(st, en, nd)
```

```
    //previous logic

}
int query(....)
{   pushDown(st,en,nd)
    //previous logic
 }
```

— o —