(Stock Price Fluctuation)

My Soln

Since price can be modified at any timestamp.

3 things we have to implement

1. minimum Price till Now
2. maximum Price till Now
3. current Price.

for current Sync with update and check what is the latest timestamp & update it

We get 4 types of calls.

1. update (timestamp, price).
2. maxPrice
3. minPrice.
4. current

In the constraint its given as

$1 \leq price, timestamp \leq 10^9$.

this Constraint gave me an idea,

{arr[timestamp] = price}

Since $timestamp \leq 10^9$,

hence we can use SparseSegmentTree.

maxSegmentTree → update operation takes, O(LogN).

minSegmentTree →

and for query we need overal maximum.

```
query(){
    return topmostNode.val
           root.val
}
```