

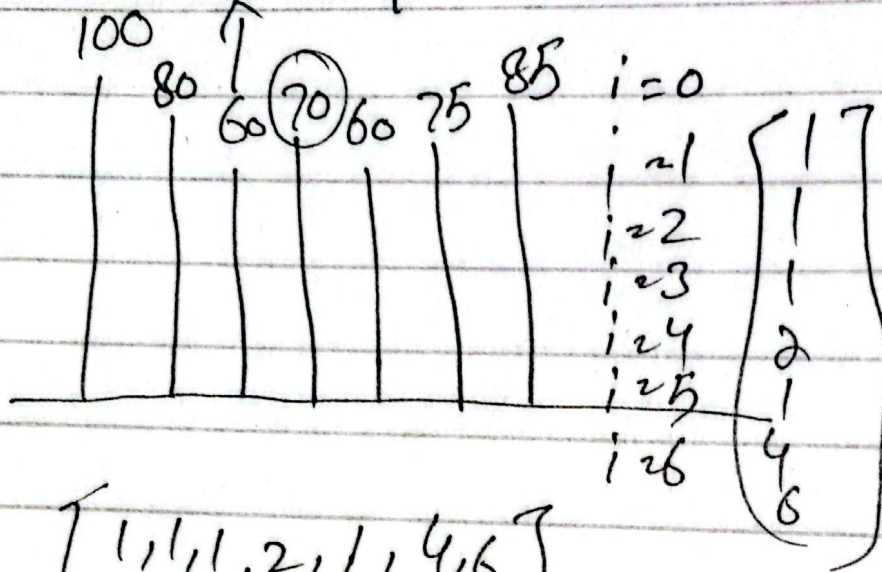
Stock Span Problem

price = [100, 80, 60, 70, 60, 75, 85]

↓ plotting

span = max no of consecutive days from today

price ← today's price
Include current



[1, 1, 1, 2, 1, 4, 6]

PreHigh = immediate greater value from any day

span = i - PreHigh

span → [1, 1, 1, 2, 1, 4, 6]

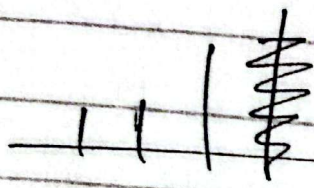
→ Find PreHigh

(Use stack) →

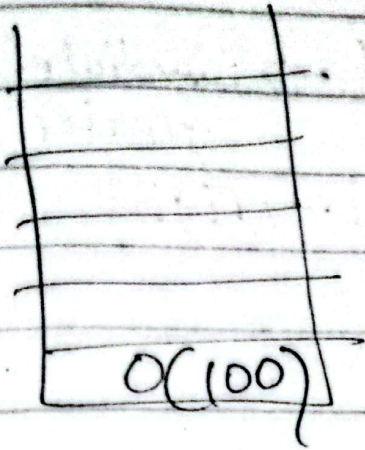
for find high val(idx)

stack empty = No PreHigh

span = i + 1



1	1	1	2	1	4	6
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If the prevhigh is smaller go down until the prevhigh found and pop out the way (in path) value.

```

vector<int> ans;
stack<int> s;
for (i=0; i<n; i++) {
    while (s.size() > 0 && price[s.top()] <= price[i]) {
        s.pop();
    }
    if (s.size() == 0) → i+1
    else
        i = s.top();
    s.push(i);
}
return ans;

```

$T.C \sim O(n)$
 $S.C = O(n)$