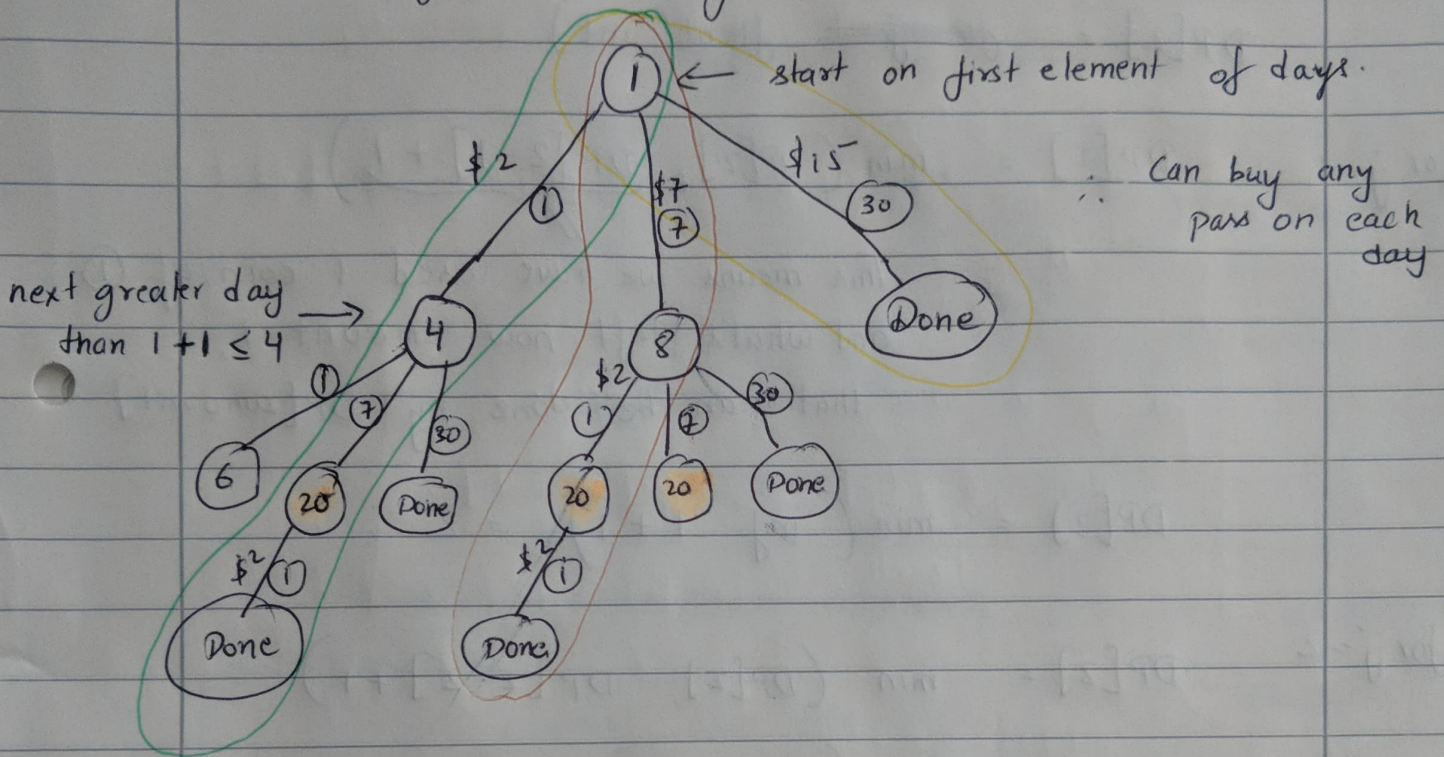


983: Minimum Cost For Tickets

days = [1, 4, 6, 7, 8, 20], costs = [2, 7, 15]

↑ ↑ ↑
1, 7, 30 day pass

(i) Start from brute force



There can be multiple paths that lead to the solution, as shown in the color above. Time complexity 3^n
 $n = \text{len}(\text{days})$

Optimization can be done using the memorization technique. See the highlighted (20) in the decision tree, it is being calculated again.

Algo:- $dp = \{\}$

```
def func(i):  
    if i == n: return 0  
    if i in dp: return dp[i]
```

See leetcode to understand, it replicates the recursion decision tree with memorization!