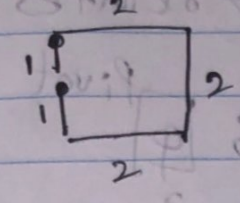


total of N sub spannings, total of N each span has $O(N)$ for recursion stack $O(N)$

both paths as the absolute min.

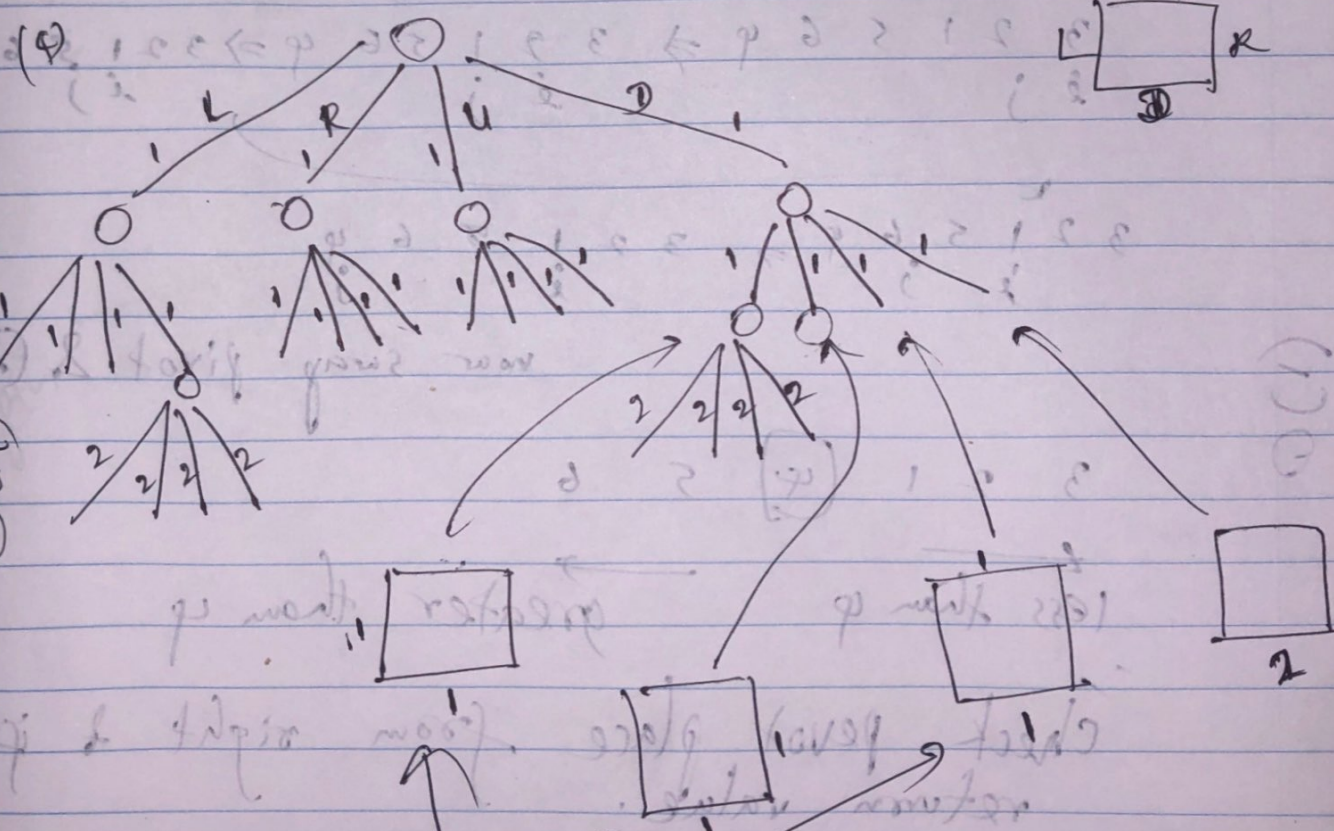
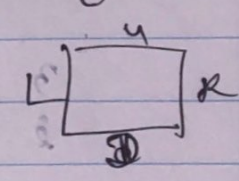
* Matchsticks to Square

1, 1, 2, 2, 2



as we need to use all matchsticks, each belongs to either side.

- (1) check if remainder of sum is 0
- (2) Sort & check if max value is $\leq \text{sum}/4$
- (3) do dfs by adding each matchstick to each side & lengths of all are equal.



identical dfs generations.