Tutorial 9

Q1. House Robber

https://leetcode.com/problems/house-robber/

1. Solve House Robber problem using the **recursive** Dynamic Programming method on LeetCode and Write the Code on the Whiteboard.
2. Analyze the Time Complexity.
3. Implement House Robber using the **iterative** Dynamic Programming method on LeetCode and Write the Code on the Whiteboard.
4. Improve the implementation using only **several variables**.

Q2. Longest Common Subsequence

https://leetcode.com/problems/longest-common-subsequence/

1. Solve Longest Common Subsequence problem using the **2D iterative** Dynamic Programming method on LeetCode and Write the Code on the Whiteboard.
2. Analyze the Time Complexity.
3. Draw the 2D dp[i,j] table for Input: text1 = "abcde", text2 = "ace".
4. Improve the implementation using only a **1D array**.

Q3. Edit Distance

https://leetcode.com/problems/edit-distance/

1. Solve Edit Distance problem using the **2D iterative** Dynamic Programming method on LeetCode and Write the Code on the Whiteboard.
2. Analyze the Time Complexity.
3. Draw the 2D dp[i,j] table for Input word1 = "intention", word2 = "execution"
4. Improve the implementation using only a **1D array**.