<https://leetcode.com/problems/longest-increasing-subsequence/>

**Recursive Approach:**  f(ind, prev\_ind)

1. Express : f(ind, prev\_ind)
2. Explore: NotPick & Pick(nums[ind]> nums[prev])
3. Return max of notPick and Pick

**Memoization:**

1. Make dp[n][n+1] to handle (prev = -1; 1-based indexing for prev)
2. Initialize dp with -1 to avoid overlapping subproblems
3. if(dp[ind][prev] != -1) return dp[ind][prev];