1)) n (even) $\longrightarrow \dfrac{n}{2} \Rightarrow C = C\left(\frac{n}{2}\right) + \frac{n}{2}$

n (odd) $\longrightarrow y = 1 + C(n+1)$

n (odd) $\longrightarrow z = 1 + C(n-1)$

n (odd) $\longrightarrow \min(y, z)$

2(A)) Just store all 2^n's by modulo math I know
→ we can just treat it as normal multiplicati

→ For checking max just check if it is greater than the last max.

2(B)) Since in a linear solution we would never skip more than two in a row we
→ can consider the solution as the max of two possible chains → $(0, n-2)$, $(1, n-1)$

→ If there is any other chain they would have picked any of these four so we can just pick the max out of these and we won't miss a case.