Fibonacci Series
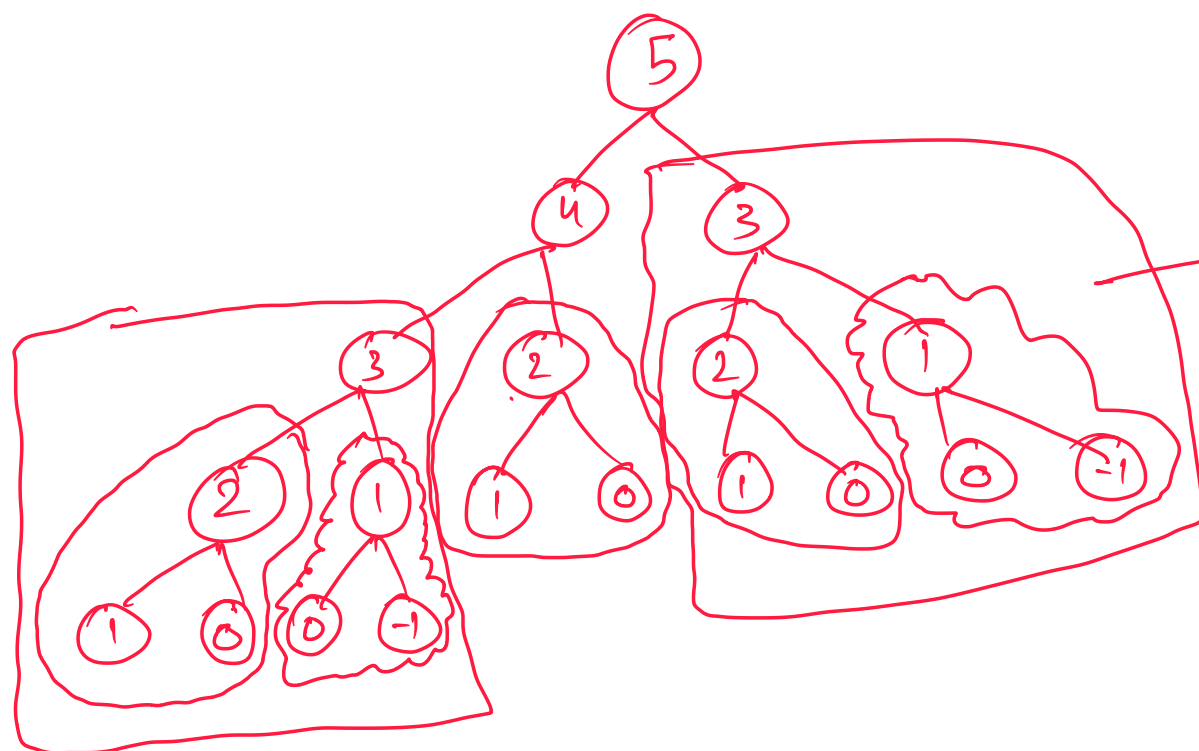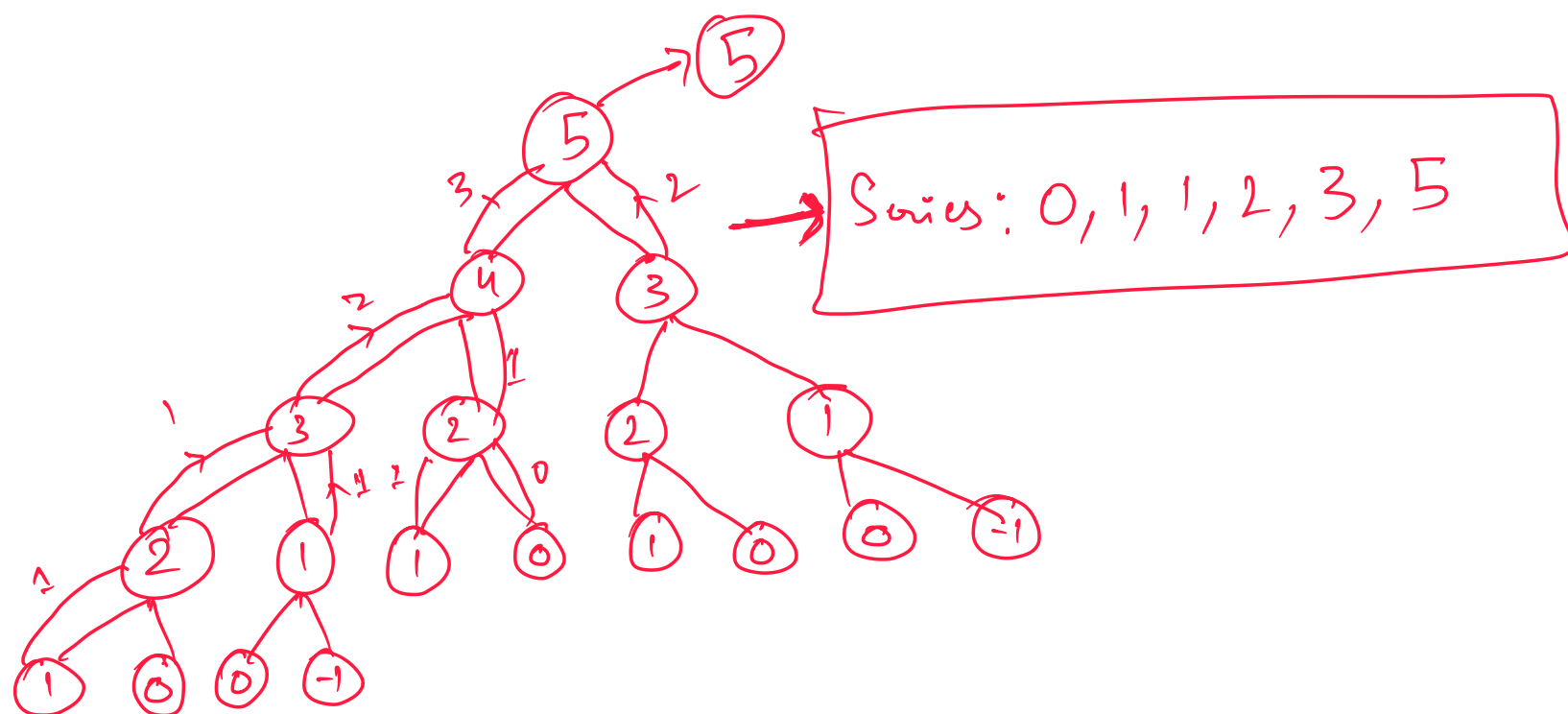
Series :-)   0 1 1 2 3 5 8 13 21

↳ *) Sum of Previous ② Numbers = fibonacci Series.

$$\Rightarrow \quad f_n = f(n-1) + f(n-2)$$

Series : 0, 1, 1, 2, 3, 5

→ if we clearly observe, the Sub-Problems are Repeating it-self.

Here, our goal is to eliminate the Repeating Sub-Problem.

Note :-) By Analyzing the Tree :-)

  i) ① = is always giving us ①

  ii) ② = is always giving us ①

  iii) ③ = is always giving us ②

Solution :-) By Storing these Value's, we can avoid the Repeating Sub-Problems.
So, instead of Calling the Routine again & again, we can Just Return the Stored value.