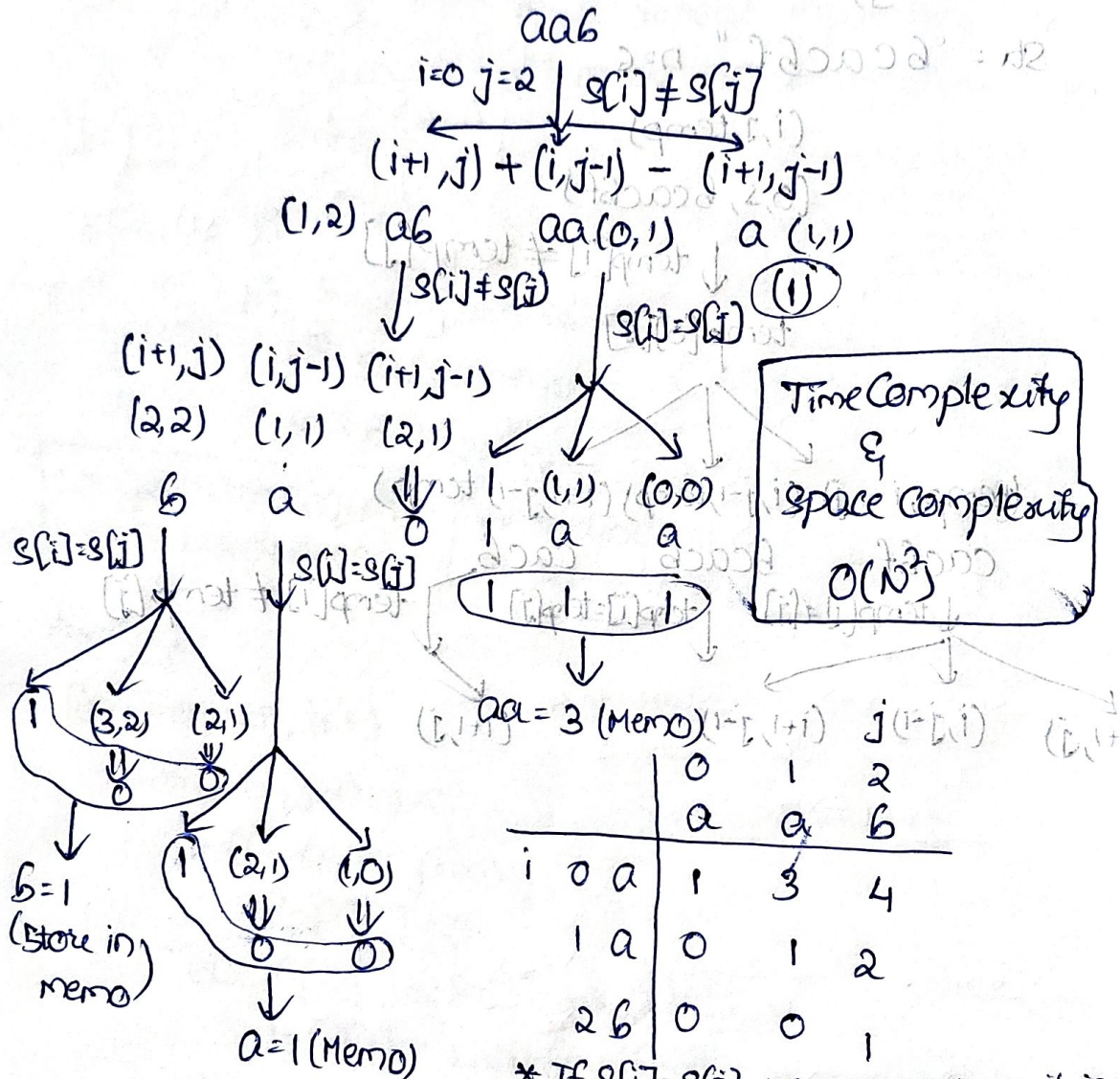


Count all palindromic Subsequences

Assume,

The string is "aab"



* If $s[i] = s[j]$, we assume that it is a palindrome and add 1 to the result, and later in the recursion of that (i, j) , if char below i & j are palindrome then I will add else func $(i+1, j-1)$

$(1+1+0) + (1+1+1) - 1 = 2+3-1 \Rightarrow 4$

Number of palindromic Subsequences possible $\Rightarrow 4$ For "aab" will subtract from the total result stack of recursion

If $\text{Memo}[i][j] \neq -1 \Rightarrow$ This is a overlapping subproblem where we faced same issue earlier and stored the solution in Memo array so there won't be necessity of re-execution. This method saves time.

$i=j \Rightarrow$ It is single char, So storing 1 in Memo array

$i > j \Rightarrow$ return 0

We need to return $\text{Memo}[0][\text{len}(s)-1]$