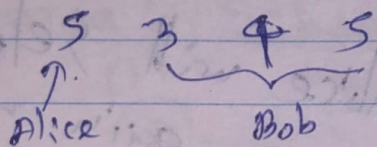
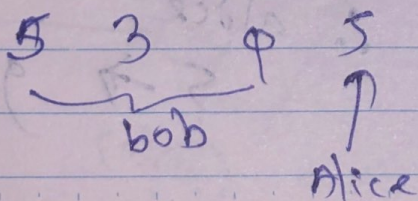


* Stone Game



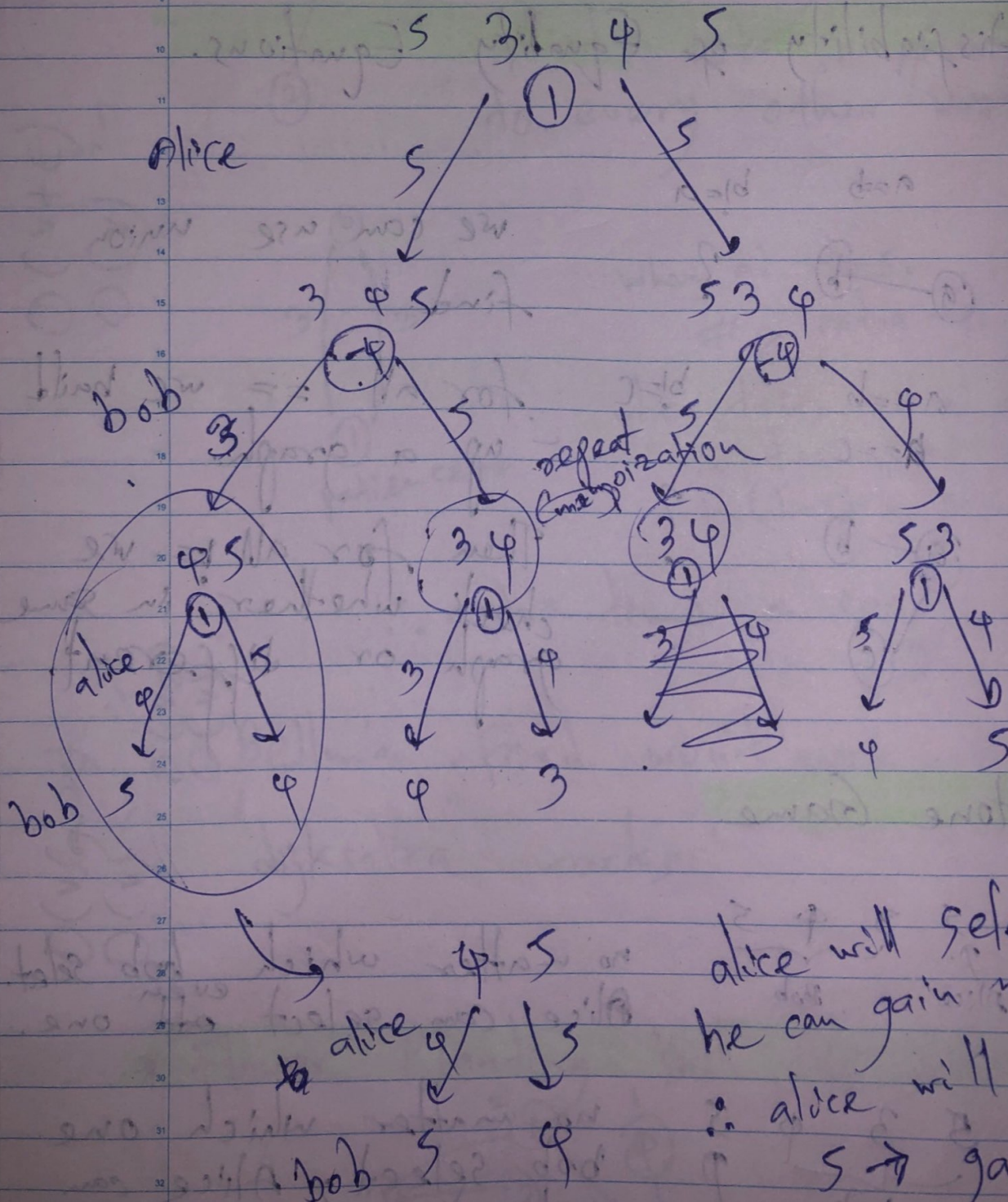
no matter which bob select. Alice can select ^{even} ~~odd~~ one.



no matter which one bob select, Alice can select odd one.

since the array is even length
& sum is odd either of
those 2 cases will win.

\therefore Alice always wins.



3 4 5

bob

3

5

bob will select s.t.
he can gain much.

∴ will select 5;
gain \varnothing

4 5

3 4

alice

①

①

can use memoization to optimize.

$\begin{pmatrix} 1 \\ 5 \end{pmatrix}$
 $\begin{pmatrix} 2 \\ 5 \end{pmatrix}$
 $\begin{pmatrix} 3 \\ 5 \end{pmatrix}$
 $\begin{pmatrix} 4 \\ 5 \end{pmatrix}$