

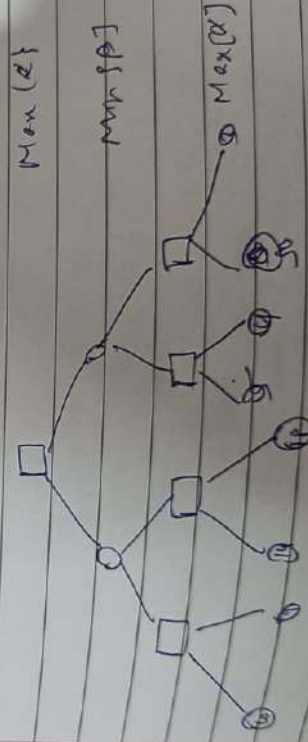
Project title :- Implemented Alpha-Beta pruning

Algorithm :-

- 1.  $\text{Alpha}(\alpha)$  -  $\text{Beta}(\beta)$  proposes to find the optimal path without knowing of every node in the game tree
- 2. Max contains  $\text{Alpha}(\alpha)$  and Min contains  $\text{Beta}(\beta)$
- 3. Min during calculations
- 4. In both Min & Max nodes, we return when  $\alpha \geq \beta$  which compares with its parent node only.
- 5. Both minimum &  $\text{Alpha}(\alpha)$  -  $\text{Beta}(\beta)$  cutoff give same path
- 6.  $\text{Alpha}(\alpha)$  -  $\text{Beta}(\beta)$  gives the optimal sol<sup>n</sup> as it takes less time to get the value for root node.

Problem.

Apply alpha-beta to find root node & path to root node (MAX node). Identify the paths where are pruned



Values (John, X)  
& Parents (V)

V killed (Y) V  
Parents (Z)

nil, Parents)  
& Pair (V)

V → killed (n)  
Avail / 164

nil)

