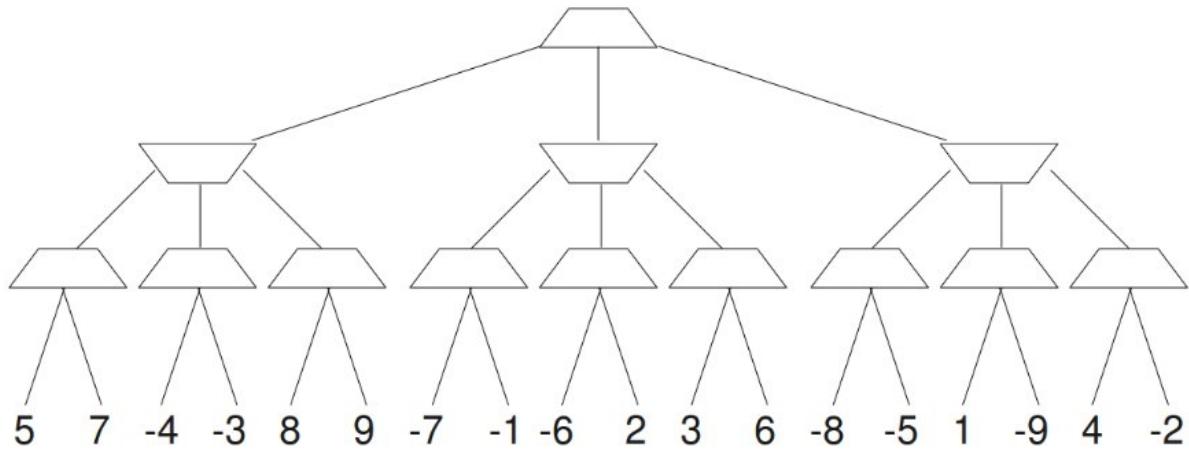


1 Minimax

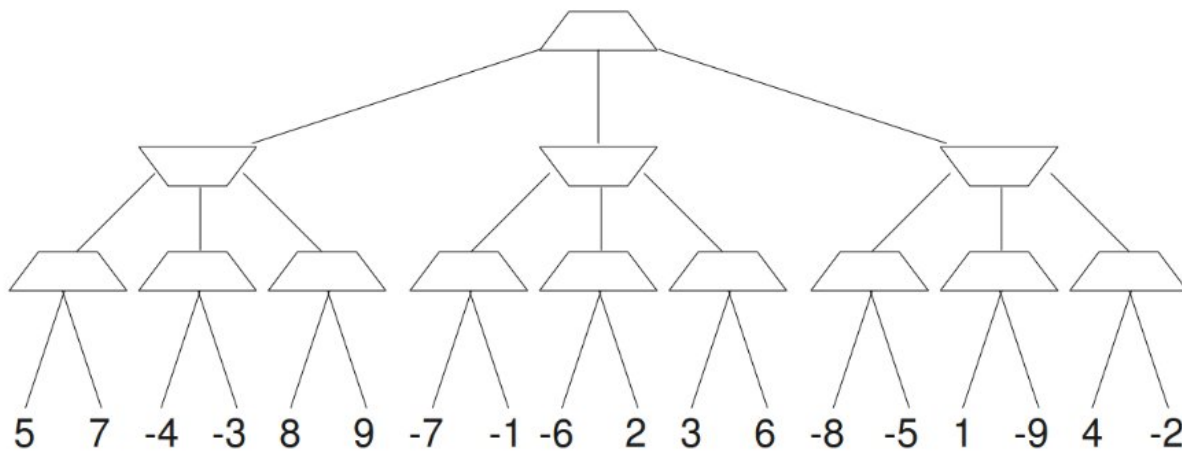
For the following game tree, carry out minimax search. Give the value for each node. The first player is max (upward facing trapezoid) the second player is min (downward facing trapezoid).



Solution:

2 Alpha-Beta pruning

Now use α - β pruning. On the same tree as before.



Let $(\alpha, \beta)_i$ be the α - β values passed down an edge to node i , etc., for all the nodes with appropriate change of index or indices. Similarly, v_i is the value passed up edge i , etc.. Show the sequence of steps, by giving the (α, β) values on the way down, and the v values on the way up.

Solution: