

Adversarial Search In-Class Exercises

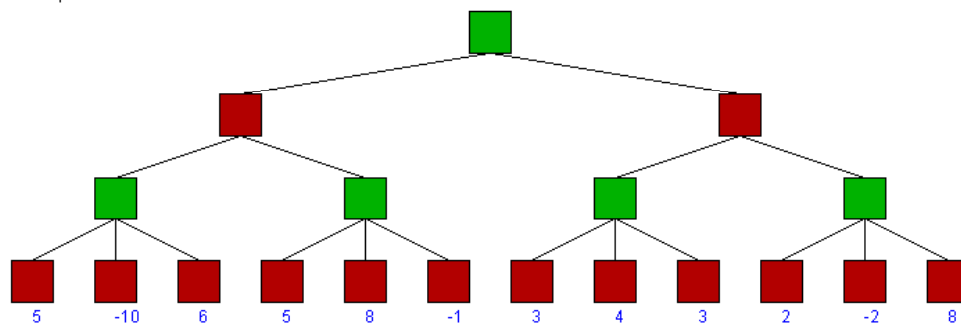
Instructor: Wei Ding

Minimax Algorithm Question 1

- Choose move to position with the highest minmax value

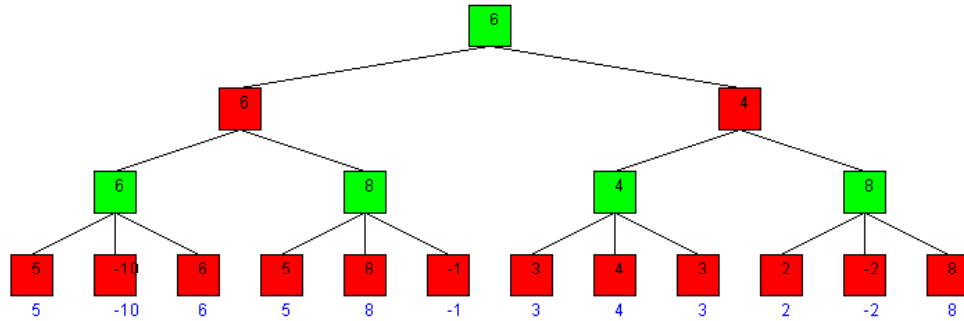
Max makes the first move.

Nodes completed: 4



Solution

Nodes completed: 19

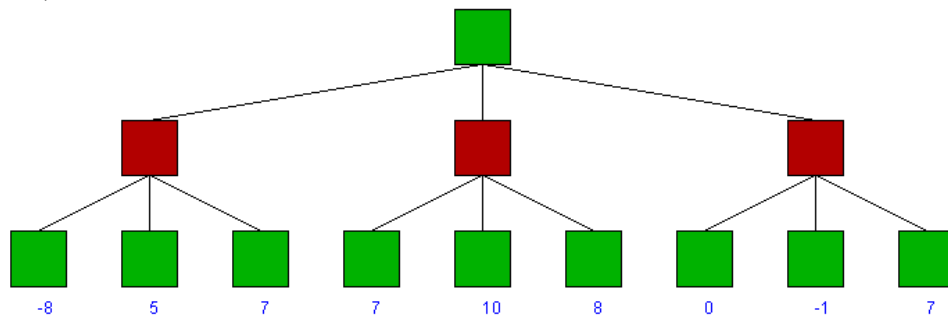


Minimax Algorithm Question 2

- Choose move to position with the highest minmax value

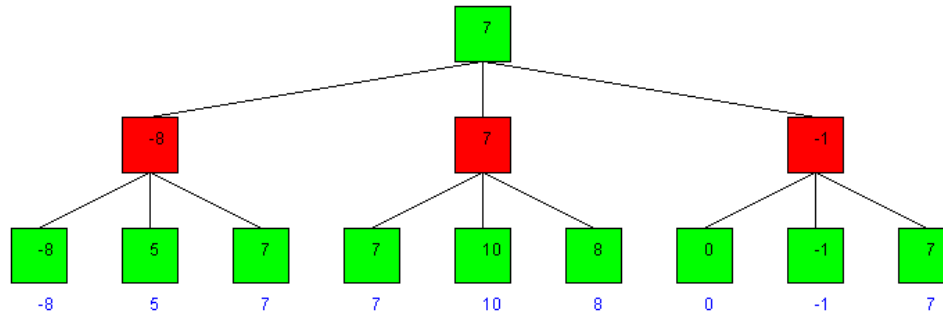
Max makes the first move.

Nodes completed: 13



Solution

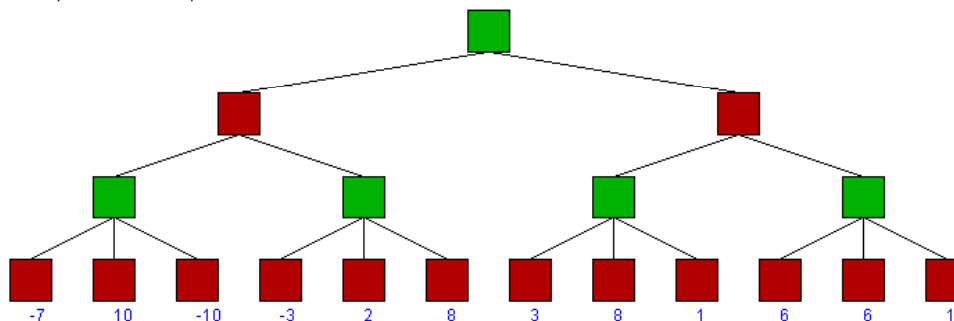
Nodes completed: 13



The α - β algorithm question 1

α , the value of the best alternative for MAX along the path to state
 β , the value of the best alternative for MIN along the path to state

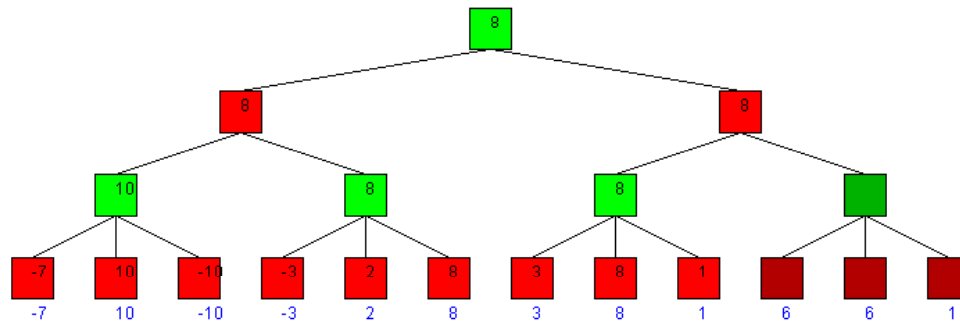
Nodes completed: 9 / Nodes pruned: 0



- Which sub-tree that we can safely prune?

Solution

Nodes completed: 15 / Nodes pruned: 4

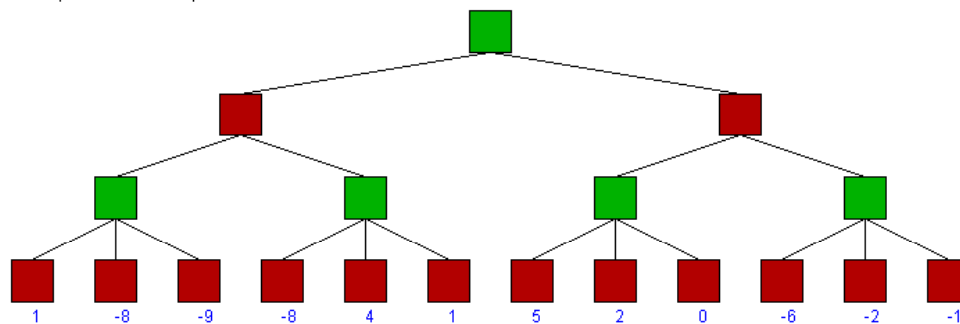


The α - β algorithm question 2

α , the value of the best alternative for MAX along the path to *state*

β , the value of the best alternative for MIN along the path to *state*

Nodes completed: 0 / Nodes pruned: 0



- Which sub-tree that we can safely prune?



Solution

Nodes completed: 18 / Nodes pruned: 1

