

Q #1 (a): A Successor function specifies legal moves and the resulting states after applying a move.

Evaluation is performed at search cutoff point and should
b) have same terminal goal state as utility fn.

c) A utility fn produces a numerical value for the terminal states.

d) Min-Max is perfect for deterministic and 2 player game, one player tries to maximize score while other tries to minimize. The goal is to reach highest minmax value.

e) In Min-Max exponential states are visited. α - β pruning decreases the no. of states to be visited. α represents the value of best choice found so far ^{at Max path} while β represents the best value found so far at MIN path.