0.1   Perfect Information

0.2   Two Player Games: Env Assumptions

0.3   Defining Zero Sum Game Problem

- Defining a set of possible states: State Space

- Specify how will you track Whose Move / Turn it is

- Specify Initial State

- Specify Goal State(s) (there can by multiple)

- Define a FINITE set of possible Actions (legal moves) for EACH state in the State Space

- Come up with a Transition Model which describes what each action does

- Come up with a Terminal Test that verifies if the game is over

- Specify the Utility (Payoff/Object) Function: a function that defines the final numerical value to player p when the game ends in the terminal state $s4$

0.4   MinMax Algorithm: The Idea

I don't know what move my opponent will choose, but I am going to ASSUME that it is going to be the best/optimal option for them.

α the value of the best (highest value)

β

0.5   Constraint Satisfaction Problem

The goal is to find an assignment (variable = value):

$$X_1 = v_1, \ldots, X_n = v_n$$

- If NO constraints violated: consistent assignment

- If ALL variables have a value: complete assignment

- If SOME variables have NO value: partial assignment

- SOLUTION: consistent and complete assignment

- PARTIAL SOLUTION: consistent and partial assignment