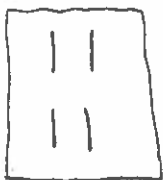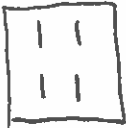# HW: Minimax 1

Suppose it is Player A's turn in a game of Nim (for a refresher on the rules of Nim, watch the lecture video "Minimax (part two)"). The current configuration of the board has two matchsticks in each row:

$$\boxed{\begin{array}{c} | \; | \\ | \; | \end{array}}$$

They're playing a weighted version of Nim where you get k points if your opponent takes the last matchstick, where k is the row of the last match remaining (i.e. if your opponent is forced to take the last matchstick and it happens to be in row 2, you get 2 points).

What is the minimax value of $\boxed{\begin{array}{c}||\\||\end{array}}$ for player A if it is currently Player A's turn? Draw out the minimax game tree and annotate each node with its minimax value, i.e. complete the following

$$\boxed{A \;\Big|\; \begin{array}{c}||\\||\end{array} \;\Big|\; ?} \longleftarrow \text{put minimax value here}$$

$$\boxed{B \;\Big|\; \begin{array}{c}||\\|\,x\end{array}\;\Big|\; ?}$$