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Project Description

My project is to write a bot to play the game 2048, which can be played online or as a phone app. My goal is to implement an AI program that can use several different heuristics to play the game that way, at the end, I can compare and contrast how the various methods perform to pick the “best” one. My idea for the program is an extension of the AI class I took with Mikey last year. It will search a state space for the next “best” move based on the heuristic implemented (such as merge the most tiles as possible, get the most points possible, keep the highest tile in the corner, etc.). The other method I would like to implement is a Monte Carlo algorithm, where the bot would have 4 possible moves to make, so it would play x number of random games following each move. Then, based on which move led to the most successful games, it will choose that move to make next. This would be another method that I could then compare and contrast at the end, as well as variations of each of these methods.