* second marker
* MCTS and CFR failed. Beyond my existing skills. The difficulties are to build a model of data that can be calculated like matrix, but the parameters are too large and complex so its hard to build the relationship among those dataset in a short time.
* The best AI still using the domain knowledge and only conquer the heads-up game, and I want to make an AI that beats multiple players. Actually, it can have a AI that works fine with plenty of domain knowledge, starting hand, 3-bet strategy and so on, like Deep-stack in Chess game, but that is not what I’m after because AlphaZero prove that the pure AI by training itself is more powerful.
* Game environment is way more complex than I thought. When the money comes in, the sequences of player became important and the calculation of stack became complex. There are also some special cases which made a function is hard to iterate.
* After achieving nothing for a week I turn to focus on the test process and that one is also time consuming.
* 3 level and 3 robots.
* Return rate. Level 3 AI: if at last I win, return threshold – 0.01. I lost, threshold + 0.1. iterate to find the best threshold.
* Texas Hold’em game is not a game that can simply conquered by math or by computational ability because its not a game that player fight against the system, it’s a game that player against each other, in other words, one’s victory is always builds on others failure. But that doesn’t mean they are not playing well.
* The essential part of this game, is not focus on what you have, but what they don’t have. It’s more like the competition of thoughts rather than just math. So its better to make some decision making and calculation function just for assistance rather than a player AI.