

Report for Project Go

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1. Preliminaries

Python, DFS.

2. Methodology

I apply DFS to find the adjacent point from the start chess.

In a given position, a liberty of a stone is an empty intersection adjacent to that stone or adjacent to a stone which is connected to that stone. (After playing their stone) a player removes from the board any stones of their opponent's color that have no liberties [2]. If the start chess and its neighbor chess with the same color are surrounded by the opponent's color without space, it means dead.

There is a rule that if the player goes down to this position that make it and its opponent no liberties, the position is available to go.

3. Empirical Verification

- Add functions to check the specific color is dead or not, if near the blank position, if out of board, etc.
- Using given data training and testing, I get the exactly the same output as the answer.

4. References

[1] Usgo.org. (2017). *The Rules of Go*. [online] Available at: <http://www.usgo.org/rules-go> [Accessed 2 Oct. 2017].

[2] En.wikipedia.org. (2017). *Rules of Go*. [online] Available at: https://en.wikipedia.org/wiki/Rules_of_Go [Accessed 2 Oct. 2017].