

Lab 2

In this assignment, you will write a game playing agent capable of playing Checkers. For details about the game, see <https://en.wikipedia.org/wiki/English draughts>.

1. Construct a general alpha-beta game playing agent which takes the current state as input and returns a move/action to be made by the agent. You may use the implementation in [the online code repository](#) of the AIMA textbook.
2. Implement an evaluation function which takes a state of the game as input and returns an evaluation value.
3. Implement a move generator function which takes a state as input and returns a list of legal moves at that state.
4. GUI is not required. You may print the 8x8 board in the console. (You are allowed to use existing GUI implementation available on the internet, but please cite the source.)
5. Your main function should be able to do the following:
 - Take as input a move from the user.
 - Update the board with the user's move.
 - Output the agent's move from the alpha-beta search.
 - Update the board with the agent's move.
 - Repeat the steps until the end of the game.
6. Compare the effect of increasing search depth and improving the evaluation function.

What to Turn In

Turn in via Canvas a compressed file (.zip .rar or .tar.gz) containing the following:

- All of your source code.
- A README file explaining how to compile and run the program.
- A short lab report in text/pdf containing the answers for question 6.