How to run the program:

This connect 4 game wrote with python. End with .py. Please run it within the command line and type python version\_2.py. to run. It will automatically run the game for you.

Design:

This program used evaluation function that calculate how many connecting points for players and opponent to get score. If we are running out of move, the score is 0. If we are getting the leaf, winning is 512, losing is -512. If the players only have one piece, score +1, have 2, score +10, have 3, score +50 and vice versa. Moreover, check who is next player, if it is player’s turn, score +16.

After that I use the alpha beta search 8 depth and cut some branch to get the result the position to move.

Solution:

I think if your evaluation function is good enough, the alpha beta algorithm have better change to win but not guarantee.