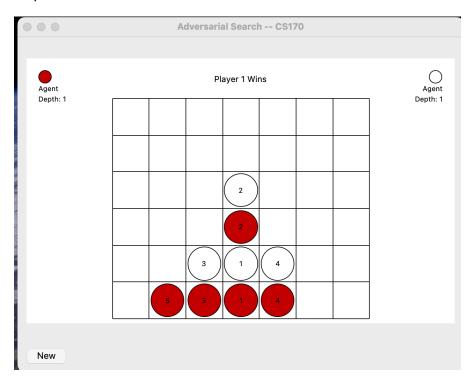
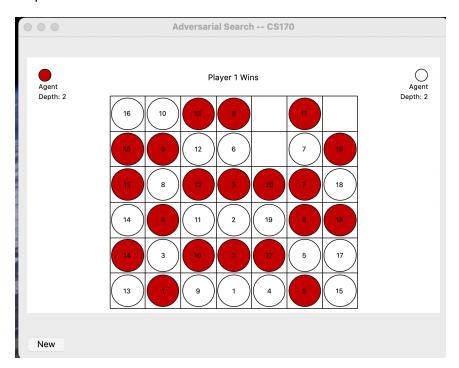
## Minimax

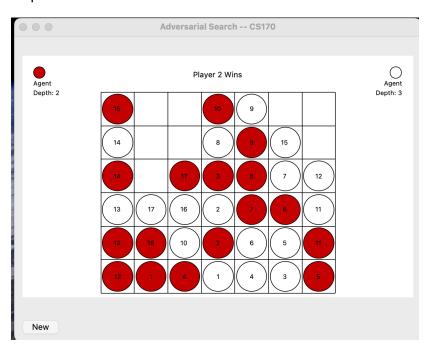
## Depth 1 v1



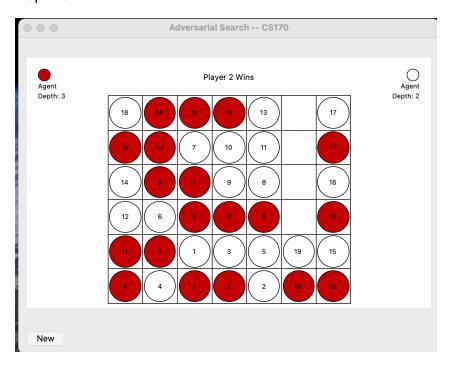
# Depth 2 v 2:



## Depth 2 v 3:

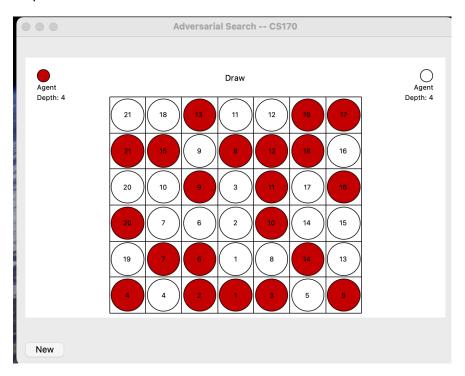


# Depth 3 v 2:



## **Alpha-Beta Pruning**

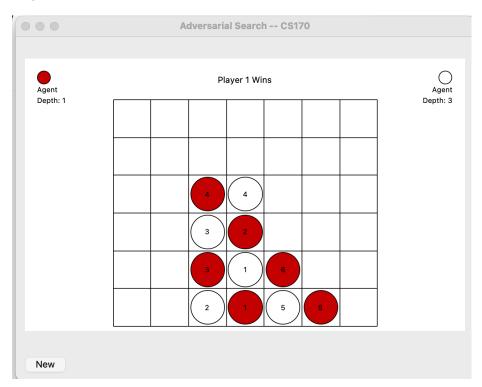
#### Depth 4 v 4:



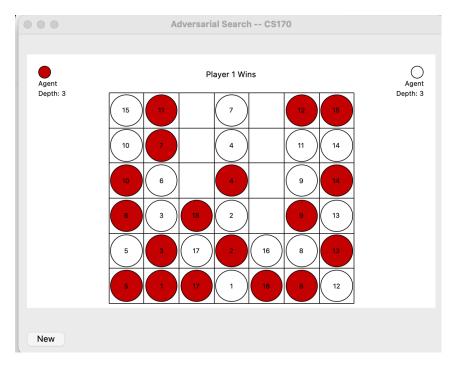
Minimax runs significantly slower than that of alpha beta, though with more depth there are more choices to make increasing the probability of winning.

# **Expectimax:**

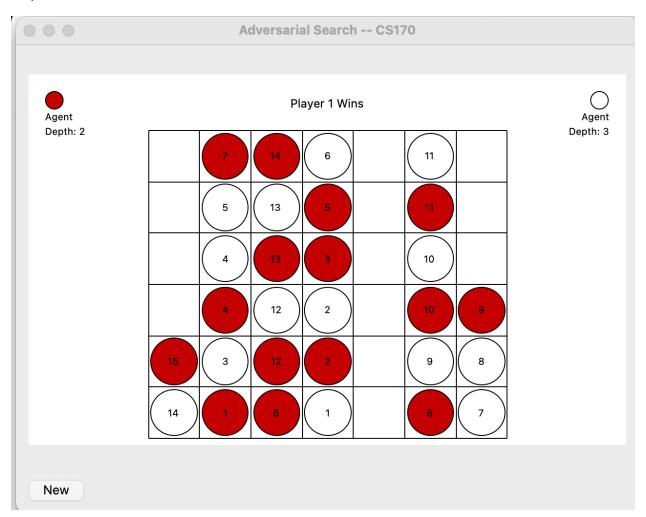
# Depth 1 v 3:



# Depth 3 v 2:



#### Depth 2 v 3:

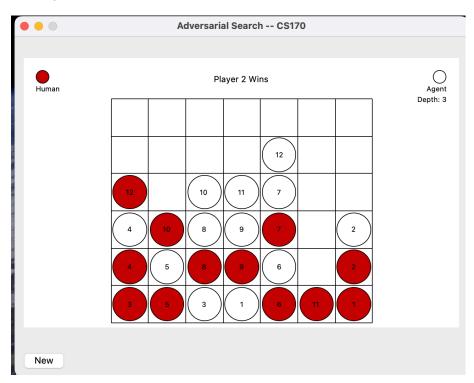


#### **Observations:**

- Alpha beta > minimax in terms of speed
- Expectimax leads to optimal decisions, because generally we make choices based on what we know. That is my understanding of expectimax.

# Human (me) vs Code

## Attempt 1:



## Attempt 2:

