The field of artificial intelligence is an ever-expanding one that is full of research opportunities. The particular area of AI we focused on was adversarial search which deals with problems like games with multiple players. What we aimed to do was create two different AI algorithms and compare their effectiveness and efficiencies while playing Tic Tac Toe and Connect Four. The two algorithms we decided to compare were Minimax and Alpha-Beta pruning because of their ubiquity in AI literature. We designed the two games and implemented both algorithms to compare speed and capability. We were able to conclude from our research that Alpha-Beta pruning is a far more efficient algorithm when compared to Minimax given the two algorithms both make the same decisions. From this research, we were able to see firsthand how these two algorithms acted in the game environments and tell what advantages they have over each other.