We’re planning to solve Sudoku instances as constraint satisfaction problems using a variety of heuristics. The algorithm we will be using is based on backtracking. We will compare these heuristics to see which perform the best in terms of time complexity and space complexity. The heuristics we will compare are: candidate reduction, uniqueness in unit, hidden pairs, naked pairs. Each heuristic uniquely finds a way to reduce the number of constraints in order to optimize the constraint results to reduce the time it takes and have an efficient search. For each heuristic, we will attempt to run different size test cases and determine which heuristic takes the shortest time to find a unique optimal solution.