

ABSTRACT

Su Doku is a puzzle game popularized by the Japanese. Numbers are inserted into a 9 x 9 grid square box and the same number can't be allowed to be laid in the same row, column or sub-box.

In this Final Assignment titled “**Comparison Analysis Between Backtracking and Dancing Links Algorithms in Time and Space Domain for Su Doku Problem Solution**” two algorithms were compared, thus are *Backtracking* and *Dancing Links*. Both algorithm's complexity were calculated manually, then compared with each other for their solving capability in *Su Doku*. Both test then being examined to see if they support each other's result, thus we can conclude which algorithm is better, in term of time and memory usage.

The test result shows that *Dancing Links* can find the solution faster, but *Backtracking* has a slight advantage in term of memory usage.

Keyword : *Su Doku, complexity, Backtracking, Dancing Links*