Solution

In order to use a graph to represent the chessboard, replace squares with vertexes. Then connect all possible combinations of two vertexes if a knight can visit one of them from another.

An Example Algorithm to find a knight's tour

1. For each vertex, count the number of vertexes it connects to.



- 2. Start from one vertex, from all vertexes it connects to, find the one with the smallest number. Go to that vertex. Remove the vertex it moves from as well as the connections of it. Re-calculate the numbers for all vertexes.
- 3. Keep doing step 3 until only 1 vertex left in the graph. The route it goes through is a knight tour.

