An explanation of Parberry's knight's tour algorithm

This document will explain the algorithm described in Ian Parberry's 1997 paper "An Efficient Algorithm for the Knight's Tour Problem". I will explain the Knight's tour problem, the notation used in the paper, and end with a detailed discussion of the divide and conquer algorithm eluded to in the paper. A reference implementation of the algorithm in Java is provided alongside this document.

My motivation for writing this document stems from the lack of accessible material on Parberry's paper online. I found the paper itself to be very dense and often lacking in explicit notes on points of importance. Other resources available online I also found to be vague or used excessive jargon relating to graph theory. I hope, therefore, to explain the algorithm and the concepts within the paper in a manner suitable for those not familiar with the notation used.