

Part III (Section 7.2): Hamilton Circuits

A Hamilton Circuit is a closed circuit that:

1. Starts and ends at the same node
2. Visits each other node only once and returns to the beginning node.

Examples:

Part IV: Finding the all Hamilton Circuits and the “best” Hamilton Circuit

Option 1: The Brute Force Algorithm

Option 2: The Nearest Neighbor Algorithm

1. Start at “home”.
2. Pick the closest node (vertex) to visit from home.
3. After step 2, pick the nearest neighbor again until all nodes have been visited.
4. Return home.

The Traveling Salesman Problem Example