

# AI Search Strategy Questions

## Problem: Knight's Tour

Generated from Knowledge Graph Analysis

This document contains 1 instance(s) of the Knight's Tour problem with questions about the most appropriate solving strategies. Each instance includes visualizations and detailed answers based on knowledge graph analysis.

### Instance 1:

**Board Size:** 6x6, **Starting Position:** (4, 3), **Visited Squares:** 4

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**Question:** For the Knight's Tour problem and the given instance, which is the most appropriate solving strategy among those mentioned in the course (BFS, DFS, UCS, A\*, GBFS, IDA\*, Hill Climbing, Simulated Annealing)?

### Answer:

**Best Strategy: DFS**

✓ Complete - finds solution if one exists | ✓ DFS standard for knight tour backtracking

**Properties:** Optimal, Complete

### Alternative Strategies:

- **BFS:** For guaranteed optimal when no heuristic
- **UCS:** When actions have varying costs

**Recommended Heuristics:** Warnsdorff's Rule, Accessibility Heuristic