

Algorithms Project 1: TSP Grading Checklist

Name _____

1. [__ /15] Explain the details of:

- ☐ N-N Implementation
- ☐ Exhaustive Search Implementation
- ☐ Discuss how you efficiently implemented the pseudo-code.

2. [__ /15] Determine the worst-case complexity

Expanded Notation:

N-N _____

E-S _____

and/or

Asymptotic Notation:

N-N _____

E-S _____

3. [__ /20] Input generation/experimental testing

- ☐ Used n large enough (10 x resolution of clock)
- ☐ Appropriate n for each algorithm (i.e., not too small for NN and not too large for exhaustive)
- ☐ Generated input randomly.
- ☐ Average of three runs on each input

4. [__ /10] Match Theory to practice (one of the following required)

- ☐ Determined a constant to compare results
- ☐ Listed $n^2, n!$ for comparison next to results
- ☐ Graphed actual and asymptotic run times
- ☐ (-) Anecdotal, i.e., “looked about right” (unscientific, not ideal)

5. [__ /40] Demo

- ☐ Runs correctly
- ☐ Understood implementation

Notes: