# Solutions:

|  | Visited List | Time (s) | # Paths Popped from Queue | Max Queue Size | Returned Path's Length/Cost |
|---|---|---|---|---|---|
| DFS | No | INFEASIBLE | INFEASIBLE | INFEASIBLE | INFEASIBLE |
| | Yes | 0.004 | 16 | 15 | 13 |
| BFS | No | 0.117 | 3899 | 15320 | 6 |
| | Yes | 0.002 | 33 | 10 | 6 |
| IDS | No | 0.007 | 4913 | 23 | 6 |
| | Yes | 0.003 | 151 | 14 | 9 |

Grading Rubric (Undergraduate/Graduate):

| Algorithm | Correctly implemented code+runs without errors | Correct answers in the table |
|---|---|---|
| DFS no visited | 20/13 | 5/4 |
| DFS visited | 20/13 | 5/4 |
| BFS no visited | 20/13 | 5/4 |
| BFS visited | 20/13 | 5/4 |
| IDS no visited | --/12 | --/4 |
| IDS visited | --/12 | --/4 |

Table entries:

- Each correct table entry was worth 1.25/1 point for undergraduate and graduate students respectively.
- For DFS/BFS the range of error for each value in the table is +/-1. Any answers within that range were deemed as correct.
- For IDS the range of error was +/- 100 for IDS no visited and +/-10 for IDS visited. Any answers within those ranges were deemed as correct.