

# Comparison Data

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| **Maze** | **Size** | **DFS Number of Steps** | **DFS Time (ms)** | **BFS Number of Steps** | **BFS Time (ms)** |
| 1 | 20 x 20 | 778 | 1.2941 | 22 | 0.4936 |
| 2 | 20 x 20 | 30 | 0.2219 | 32 | 0.4687 |
| 3 | 20 x 20 | 657 | 0.9503 | 103 | 0.5995 |
| 4 | 20 x 20 | 29 | 0.242 | 30 | 0.4839 |
| 5 | 20 x 20 | 789 | 1.1494 | 10 | 0.4599 |
| 6 | 20 x 50 | 1936 | 2.1072 | 56 | 0.5592 |
| 7 | 20 x 50 | 1966 | 1.9749 | 39 | 0.5398 |
| 8 | 20 x 50 | 34 | 0.2376 | 35 | 0.5286 |
| 9 | 20 x 50 | 1983 | 2.1426 | 16 | 0.4667 |
| 10 | 20 x 50 | 23 | 0.2198 | 24 | 0.4827 |
| 11 | 100 x 100 | 50 | 0.2993 | 51 | 0.5731 |
| 12 | 100 x 100 | 19974 | 9.4012 | 25 | 0.4977 |
| 13 | 100 x 100 | 35 | 0.2543 | 36 | 0.5263 |
| 14 | 100 x 100 | 19969 | 8.8147 | 31 | 0.5369 |
| 15 | 100 x 100 | 19976 | 8.5338 | 24 | 0.5008 |

# Analysis

BFS performs significantly better compared to DFS as the solving time and number of steps increase at a faster rate for DFS than BFS. BFS performed significantly less or similar steps to achieve the same outcome than DFS. DFS may end up traversing down wrong paths increasing the steps required.