OS X TESTS

| N (nodes) | Time (ms) | Java: Warshall | Mac | | N (nodes) | Time (ms) | C++: Warshall w/o printing | Mac |
|---|---|---|---|---|---|---|---|---|
| 4 | 0 | | | | 4 | 1 | | |
| 8 | 0 | | | | 8 | 0 | | |
| 16 | 0 | | | | 16 | 1 | | |
| 32 | 1 | | | | 32 | 0 | | |
| 64 | 5 | | | | 64 | 3 | | |
| 128 | 17 | | | | 128 | 19 | | |
| 256 | 43 | | | | 256 | 130 | | |
| 512 | 309 | | | | 512 | 778 | | |
| 1024 | 2578 | | | | 1024 | 6341 | | |
| 4096 | 166397 | | | | 4096 | 413127 | | |
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| | | | | | | | | |
| N (nodes) | Time (ms) | Java: DepthFirstSearch | Mac | | N (nodes) | Time (ms) | C++: DepthFirstSearch | Mac |
| 4 | 0 | | | | 4 | 1 | | |
| 8 | 0 | | | | 8 | 1 | | |
| 16 | 0 | | | | 16 | 1 | | |
| 32 | 1 | | | | 32 | 1 | | |
| 64 | 4 | | | | 64 | 2 | | |
| 128 | 30 | | | | 128 | 9 | | |
| 256 | 28 | | | | 256 | 55 | | |
| 512 | 198 | | | | 512 | 322 | | |
| 1024 | 1437 | | | | 1024 | 2427 | | |
| 4096 | 86071 | | | | 4096 | 157579 | | |
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# UNIX TESTS

| N (nodes) | Time (ms) | Java: Warshall | Unix | | N (nodes) | Time (ms) | C++: Warshall | Unix |
|---|---|---|---|---|---|---|---|---|
| 4 | 0 | | | | 4 | 0 | | |
| 8 | 0 | | | | 8 | 0 | | |
| 16 | 0 | | | | 16 | 0 | | |
| 32 | 6 | | | | 32 | 0 | | |
| 64 | 33 | | | | 64 | 3 | | |
| 128 | 109 | | | | 128 | 19 | | |
| 256 | 82 | | | | 256 | 150 | | |
| 512 | 804 | | | | 512 | 1558 | | |
| 1024 | 8821 | | | | 1024 | 14906 | | |
| 4096 | 499487 | | | | 4096 | 962130 | | |
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| | | | | | | | | |
| N (nodes) | Time (ms) | Java: DepthFirstSearch | Unix | | N (nodes) | Time (ms) | C++: DepthFirstSearch | Unix |
| 4 | 0 | | | | 4 | 0 | | |
| 8 | 0 | | | | 8 | 0 | | |
| 16 | 0 | | | | 16 | 0 | | |
| 32 | 2 | | | | 32 | 1 | | |
| 64 | 19 | | | | 64 | 1 | | |
| 128 | 43 | | | | 128 | 6 | | |
| 256 | 66 | | | | 256 | 48 | | |
| 512 | 331 | | | | 512 | 362 | | |
| 1024 | 1614 | | | | 1024 | 2745 | | |
| 4096 | | <—-Stack Overflow | | | 4096 | 173429 | | |
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| Time Comparisons between Implementations and Systems | | | | |
|---|---|---|---|---|
| **Time Comparisons between Implementations and Systems (512 nodes)** | | | | |
| **Warshall** | | **Parameters for all comparisons: (adjacency matrix with 512 nodes)** | | |
| *Unix C++* | *Unix Java* | | ***Java was 1.93 times Faster Than C++ on Unix*** | |
| 1558 | 804 | 1.93781094527363 | x Faster than C | |
| | | | | |
| **Warshall** | | | | |
| *OSX C++* | *OSX Java* | | ***Java was 2.51 times Faster Than C++ on OS X*** | |
| 778 | 309 | 2.51779935275081 | x Faster than C++ | |
| 2.0025706940874 | 2.60194174757282 | | | |
| ***C++ on OSX returned a value 2.00 times Faster*** | ***Java returned a solution 2.60 times faster on OS X vs Unix*** | | | |
| | | | | |
| *DFS* | | | | |
| *Unix C++* | *Unix Java* | | ***Java was 1.09 times Faster Than C++ on Unix*** | |
| 362 | 331 | 1.09365558912387 | x Faster than C++ | |
| | | | | |
| *DFS* | | | | |
| *OSX C++* | *OSX Java* | | ***Java was 1.62 times Faster Than C++ on OS X*** | |
| 322 | 198 | 1.62626262626263 | x Faster than C++ | |
| 1.12422360248447 | 1.67171717171717 | | | |
| ***C++ returned a value 1.12 times Faster on OS X*** | ***Java returned a solution 1.67 times faster on OS X*** | | | |
| | | | | |
| Comparison of **Warshall** & *DFS* | | | | |
| *Unix C++* | 1558 | 362 | 4.30386740331492 | **DFS was 2.47 times faster than Warshall: Unix C++** |
| *Unix Java* | 804 | 331 | 2.42900302114804 | **DFS was 1.68 times faster than Warshall: Unix Java** |
| | | | | |
| *OS X C++* | 778 | 322 | 2.41614906832298 | **DFS was 4.49 times faster than Warshall: OS X C++** |
| *OS X Java* | 309 | 198 | 1.56060606060606 | **DFS was 2.26 times faster than Warshall: OS X Java** |