

Lab 1 Part 2
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Breadth First Search (BFS)	
./puzzles/Part2/S2.txt	<pre> +-----+ Total nodes generated: 140787 Total time taken: 0sec 658ms Path length: 24 Path: RRDLLURURDLULDDRRULDLUU +-----+ </pre>
./puzzles/Part2/S3.txt	<pre> +-----+ Total nodes generated: 70758 Total time taken: 0sec 358ms Path length: 20 Path: LDLURDDLURRDLLURRULL +-----+ </pre>
./puzzles/Part2/S5.txt	<pre> The inputted puzzle is not solvable (odd number of inversions: 11) +-----+ 2 5 3 4 _ 7 8 6 1 +-----+ </pre>
./puzzles/Part2/S11.txt	<pre> +-----+ Total nodes generated: 98 Total time taken: 0sec 4ms Path length: 6 Path: RRDLLU +-----+ </pre>
./puzzles/Part2/S15.txt	<pre> +-----+ Total nodes generated: 181439 Total time taken: 0sec 857ms Path length: 31 Path: DRULURRDLDLUURRDDLLUURDRDLLURUL +-----+ </pre>

Iterative Deepening Search (IDS)	
./puzzles/Part2/S2.txt	<pre> +-----+ Path: timed out. Path length: timed out. Total nodes generated: <<??>> Total time taken: > 15 min +-----+ </pre>
./puzzles/Part2/S3.txt	<pre> +-----+ Path: timed out. Path length: timed out. Total nodes generated: <<??>> Total time taken: > 15 min +-----+ </pre>
./puzzles/Part2/S5.txt	<pre> The inputted puzzle is not solvable (odd number of inversions: 11) +-----+ 2 5 3 4 _ 7 8 6 1 +-----+ </pre>
./puzzles/Part2/S11.txt	<pre> +-----+ Total nodes generated: 412 Total time taken: 0sec 5ms Path length: 6 Path: RRDLLU +-----+ </pre>
./puzzles/Part2/S15.txt	<pre> +-----+ Path: timed out. Path length: timed out. Total nodes generated: <<??>> Total time taken: > 15 min +-----+ </pre>

A-Star (heuristic 1)	
./puzzles/Part2/S2.txt	+-----+ Total nodes generated: 36974 Total time taken: 0sec 262ms Path length: 24 Path: RRDDLURURDLULDDRULDLUU +-----+
./puzzles/Part2/S3.txt	+-----+ Total nodes generated: 22787 Total time taken: 0sec 182ms Path length: 20 Path: LDLURDDLURDLLURRULL +-----+
./puzzles/Part2/S5.txt	The inputted puzzle is not solvable (odd number of inversions: 11) +-----+ 2 5 3 4 _ 7 8 6 1 +-----+
./puzzles/Part2/S11.txt	+-----+ Total nodes generated: 35 Total time taken: 0sec 7ms Path length: 6 Path: RRDLLU +-----+
./puzzles/Part2/S15.txt	+-----+ Total nodes generated: 172555 Total time taken: 0sec 860ms Path length: 31 Path: DRULURDLDLUURDDLURDRDLLURUL +-----+

A-Star (heuristic 3)	
./puzzles/Part2/S2.txt	+-----+ Total nodes generated: 18807 Total time taken: 0sec 223ms Path length: 26 Path: RDDRUULDDRULDLUURDLULDRUL +-----+
./puzzles/Part2/S3.txt	+-----+ Total nodes generated: 4580 Total time taken: 0sec 96ms Path length: 20 Path: LDLURDDLURDLLURRULL +-----+
./puzzles/Part2/S5.txt	The inputted puzzle is not solvable (odd number of inversions: 11) +-----+ 2 5 3 4 _ 7 8 6 1 +-----+
./puzzles/Part2/S11.txt	+-----+ Total nodes generated: 27 Total time taken: 0sec 5ms Path length: 6 Path: RRDLLU +-----+
./puzzles/Part2/S15.txt	+-----+ Total nodes generated: 98220 Total time taken: 0sec 613ms Path length: 31 Path: URRDLLUURDLDLUURDRULDRDLLURUL +-----+