

CS 411 – HW 3

Input: 1, 0, 2, 4, 5, 7, 3, 8, 9, 6, 11, 12, 13, 10, 14, 15

Search Strategy	Memory Usage	Running Time	# Expanded Nodes	Path to goal
BFS	$O(V)$	$O(V+E)$		1207
IDDFS	$O(bd)$	$O(b)$		
A* 1	12	$O((be)a)$	7	7
A* 2	296	$O((be)a)$	280	7

Input: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 0, 11, 13, 14, 15, 12

Search Strategy	Memory Usage	Running Time	# Expanded Nodes	Path to goal
BFS	$O(V)$	$O(V+E)$		12
IDDFS	$O(bd)$	$O(b)$		
A* 1	5	$O((be)a)$	7	7
A* 2	33	$O((be)a)$	32	2

Input: 0, 1, 2, 4, 5, 7, 3, 8, 9, 6, 11, 12, 13, 10, 14, 15

Search Strategy	Memory Usage	Running Time	# Expanded Nodes	Path to goal
BFS	$O(V)$	$O(V+E)$		2862
IDDFS	$O(bd)$	$O(b)$		
A* 1	12	$O((be)a)$	8	8
A* 2	449	$O((be)a)$	440	8