## Sheet1

# **Maximum Frontier Size (number of Nodes)**

Number of Disks	Depth_First_Search	Bidirectional_BFS	Breadth_First_Search
2	2 4	. 3	3
3	9	8	14
4	28	21	36
5	81	. 79	156
6	244	254	528
7	729	1079	2164
8	3 2188	4247	8256
g	6561	. 16599	33236
10	19684	66135	131328

### **Run time of Algorithms (seconds)**

•	` ,		
Number of Disks	Depth_First_Search	Bidirectional_BFS	Breadth_First_Search
2	0.000156392	0.000212669	0.000096286
3	0.000204044	0.000455272	0.000719421
4	0.000950633	0.00179459	0.003294816
5	0.002016366	0.007936978	0.01786741
6	0.006868233	0.041572044	0.106164721
7	0.012976039	0.26530022	0.740262595
8	0.06765992	2.026069019	6.571621341
9	0.128477633	16.297773958	52.629218872
10	0.726265783	118.008149897	389.933532058

### **Total Number of Touched Nodes**

Number of Disks D	epth_First_Search	Bidirectional_BFS	Breadth_First_Search
2	6	10	5
3	9	22	36
4	49	86	184
5	81	486	1194
6	428	2506	6738
7	729	15182	43288
8	3831	91516	257792
9	6561	542326	1606086
10	34450	3286532	9671326

#### Sheet1

# 5 10 29 82 245 730 2189 6562 19685 Iterative\_Deepening\_DFS 0.000472912 0.000987642 0.009155311 0.055075039 0.537936986 4.933634893 55.269963468 744.907908745 8319.07307241 Iterative\_Deepening\_DFS 28 55 534 3403 30992 266815 2404618 21533203

193828356

Iterative\_Deepening\_DFS