Challenge Question

	0	1	2	3	4	5	6	7
0	0	8 Barrier	16	24	32	40	48	56
1	1	9	17	25	33	41	49 Barrier	57
2	2	10	18	26	34 Barrier	42	50	58
3	3	11	19	27	35	43	51	59
4	4	12 Start	20	28	36 Barrier	44	52	60 Barrier
5	5	13	21	29	37	45	53	61
6	6	14	22	30	38	46	54	62 GOAL
7	7	15	23 Barrier	31	39	47	55	63

Generate 3 separate mazes by randomizing Start point, end point and 6 barriers.

Execute BFS, DFS and A* for each configuration individually outputting visited nodes list and the time to find goal assuming each edge takes 1 min for traversal. Use the Manhattan distance as the heuristic host function for A*.

Analyze the search results based on time complexity, space complexity, completeness and optimality.