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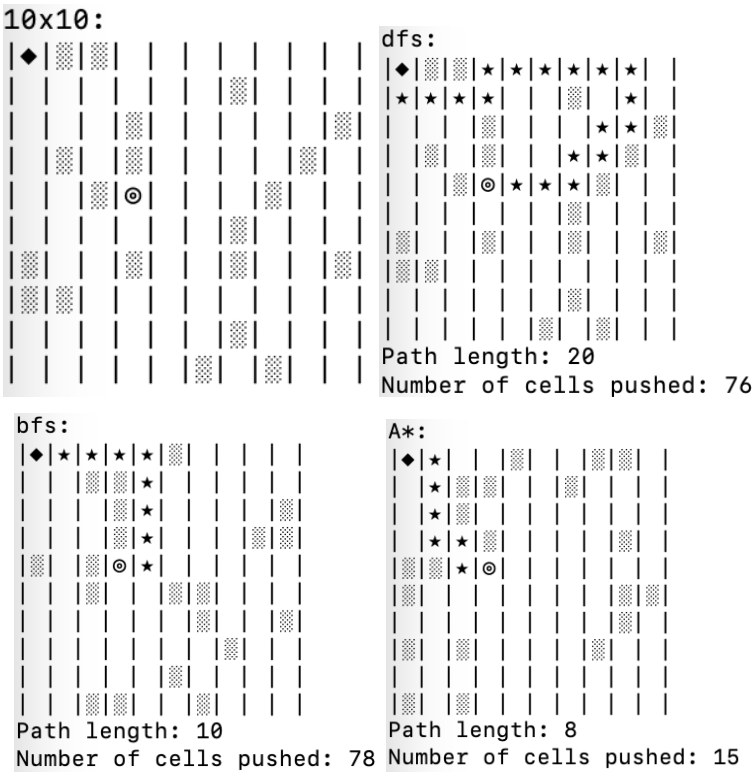
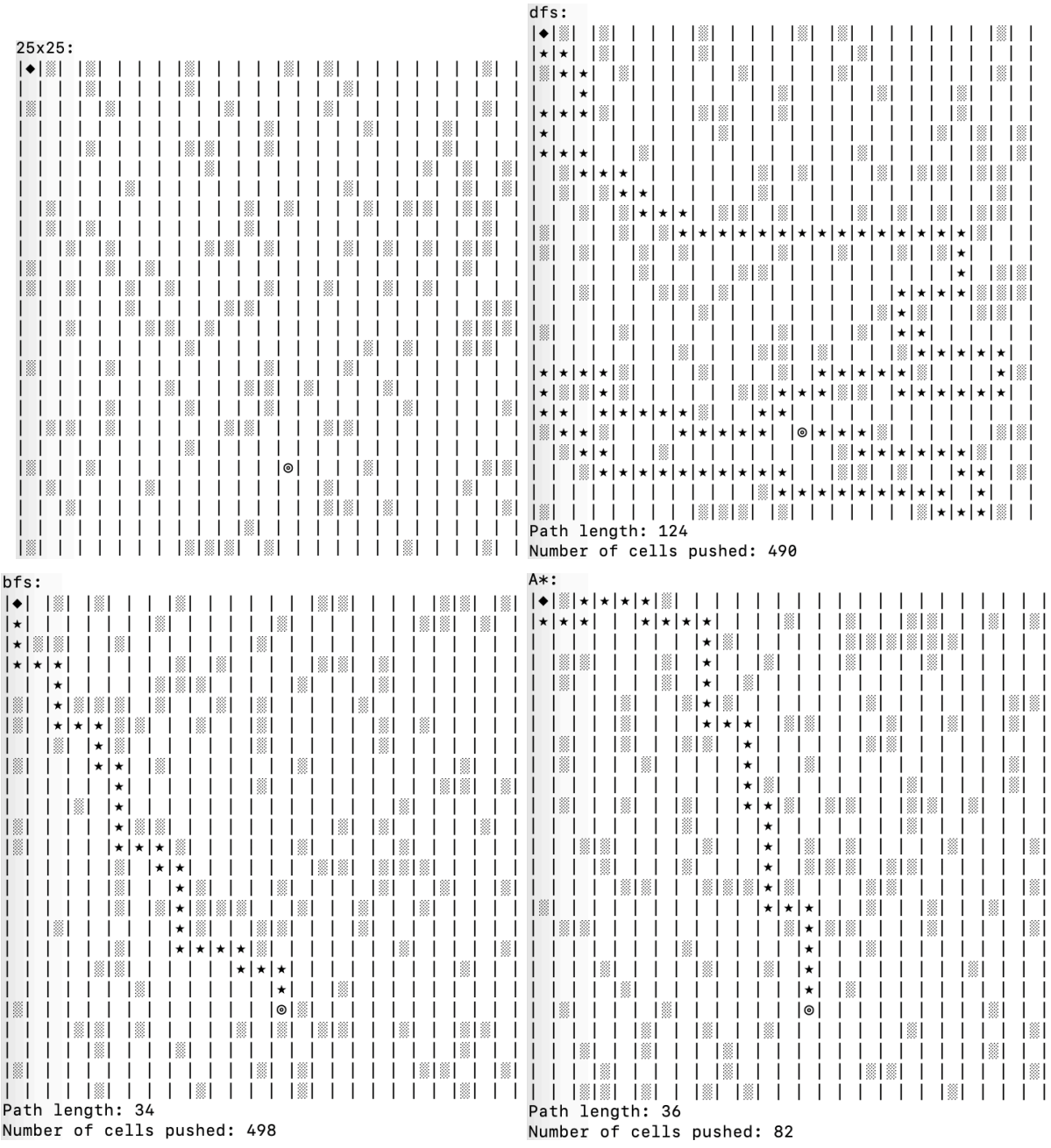
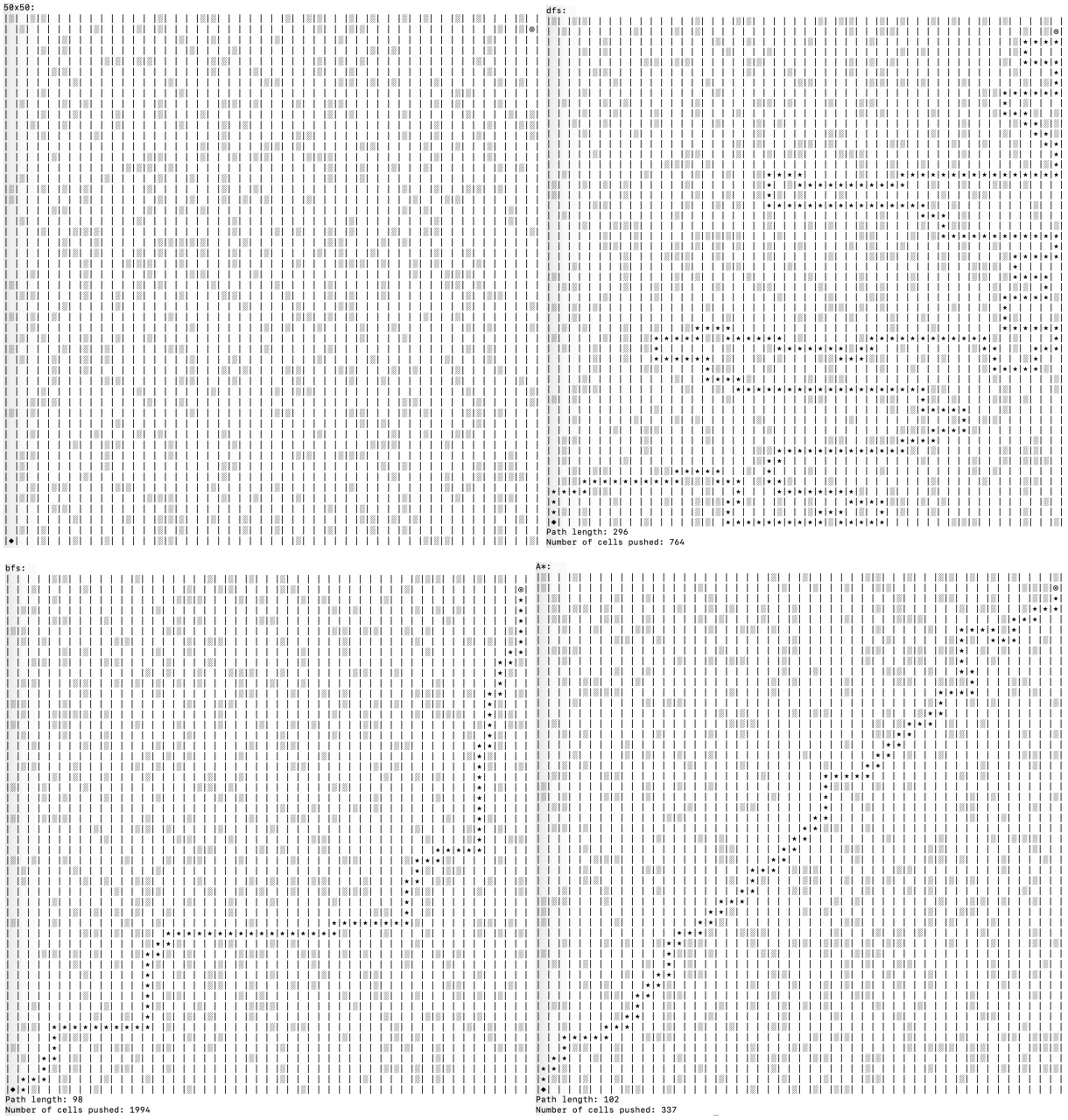
Lab 6 Reflection



Throughout the experiment, dfs was always the most inefficient way to find the goal. We can see that dfs is already the most inefficient method. Bfs and A* are similar, however, bfs has so much more amount of cells pushed, thus this shows that A* costs less.



As the grid size becomes bigger, things also become more vivid.. For example, dfs is more inefficient than bfs and A*. It is about the comparison of bfs and A*. The path length of bfs and A* are somewhat similar, however, the number of cells pushed are significantly different. As mentioned in 10 by 10, A* is faster to compute than bfs.



As the size gets bigger, the paths that each method takes becomes clear. Dfs is goes left and right, bfs has less turns, and A* goes diagonally to the goal. By looking at the path length of each methods, bfs has the shortest path length, then A*, and lastly dfs. However, as I test more, I found out that A* and bfs have similar path length. Next, looking at the number of cells pushed, it is obvious that A* has the shortest amount of cells pushed, that means it is faster for the computer to calculate the path. Bfs has the most, and dfs has the second most.