

Time Complexity and Space complexity

Code 1: It has a time complexity of $O(n^2)$ where n is the length of the matrix we iterate in a nested loop. It also has a space complexity of $O(1)$.

Code 2: $O(E \cdot V)$ where E is the number of edges and V is the number of vertices. It has a space complexity $O(V^2)$ where V is the recursive calls

Code 3: It has a time complexity of $O(n)$ where n is the vertices being iterated. It has a space complexity of $O(N)$ where n is the number of nodes and edges being stored.