#7: Graph and Search

Problem and Answer

Graph:

Clone graph

Copy List with Random Pointer

Topological sorting

Search:

Depth First Search

Breadth First Search

BFS Idea: 从某个点出发， 找到其他所有的点。

Conclusion

DFS (O(2^n), O(n!)) (思想:构建搜索树+判断可行性)

1. Find all possible solutions

2. Permutations / Subsets

BFS (O(m), O(n))

1. Graph traversal (每个点只遍历一次)

2. Find shortest path in a simple graph