DFS (tree/graph 之外)

```
"""
1. 画 DFS 递归调用树
2. 思考 DFS 节点之间的信息传递
    1. 向下👇传递信息：dfs() 的输入
    2. 向上👆传递信息：dfs() 的返回值
    3. 用全局变量保存全局信息
"""

#### DFS @ List #####
def dfs(node):
    dfs(node.next)

#### DFS @ Tree #####
def dfs(node):
    dfs(node.left)
    dfs(node.right)

#### DFS @ Implicit Tree (Backtracking) #####
def dfs(path, rest):
    if accept(path): results.append(path)
    for node in rest:
        path.append(node)
        dfs(path,  rest-node)
        path.pop()

#### DFS @ Graph #####
def dfs(u):
    visited[u] = 1   # 1 表示开始访问 u 节点
    for v in E[u]:
        if visited[v] == 0 : dfs(v)
        elif visited[v] == 1: # Do Something
        elif visited[v] == 2: # Do Something
    visited[u] = 2   # 2 表示结束访问 u 节点
```

tree or graph

Loud and Rich `dfs @ graph` `draw dfs calling tree`

Employee Tree Importance `dfs @ tree`

string

Decode String `example: "0[1[]]23[ab]cd"` `dfs`
Ternary Expression Parser `example: T?T?F:5:3` `dfs`

Grid

Minesweeper `dfs`
Flood Fill `dfs`
Number of Islands `dfs`
Number of Distinct Islands I `descriptor` `srrd____ != srr_d___`
Number of Distinct Islands II (rotation) `list of coords` `normalize?`

Done

Nested-List Weight Sum I (depth as weight) `dfs`
Nested-List Weight Sum II (height as weight) `dfs` Pyramid Transition Matrix `dfs` `itertools.product`

To-Do

Robot Room Cleaner
House Robber III

Cracking the Safe
Contain Virus
24 Game
Increasing Subsequences
Longest Increasing Path in a Matrix
Zuma Game
Matchsticks to Square