

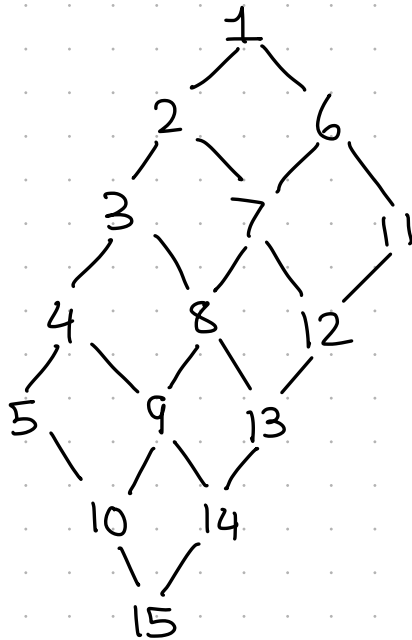
## HW2-1 DFS and BFS

## DFS and BFS Path example

Start at the black 1 position

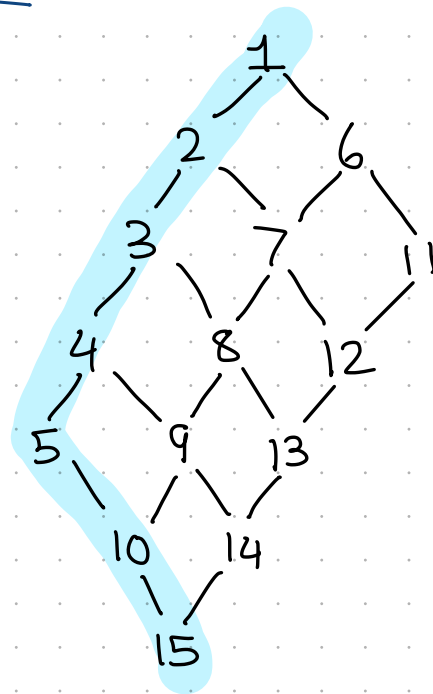
Goal getting the red 15 position

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

BFS Path :

BFS explores all the neighbors at the given depth first before moving to the next depth level. So, the BFS path would be

1 → 2 → 6 → 3 → 7 → 11 → 4 → 8 →  
12 → 5 → 9 → 13 → 10 → 14 → 15

DFS Path:

The DFS path goes as far as possible before backtracking so, the DFS path would be

1 → 2 → 3 → 4 → 5 → 10 → 15