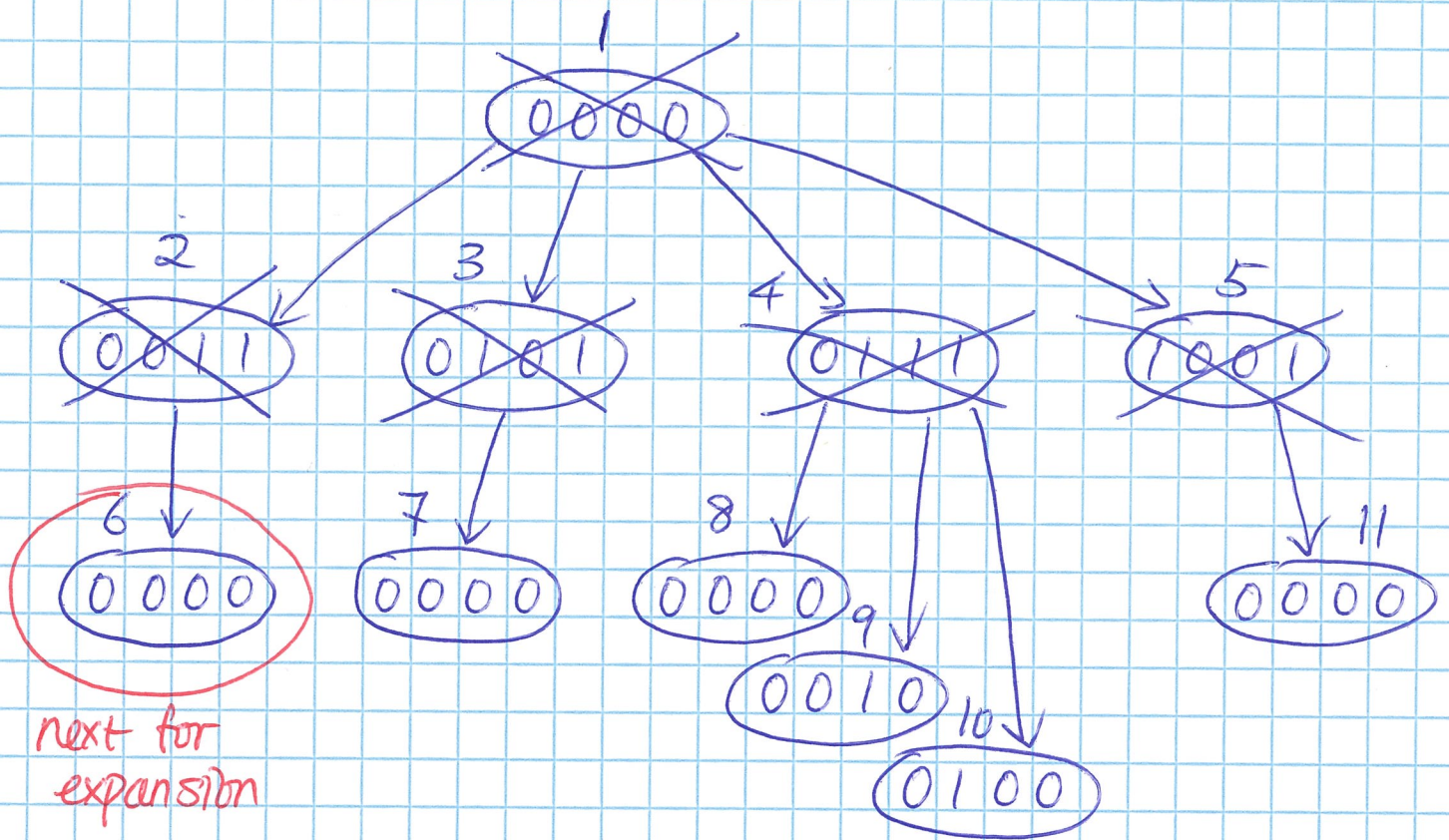


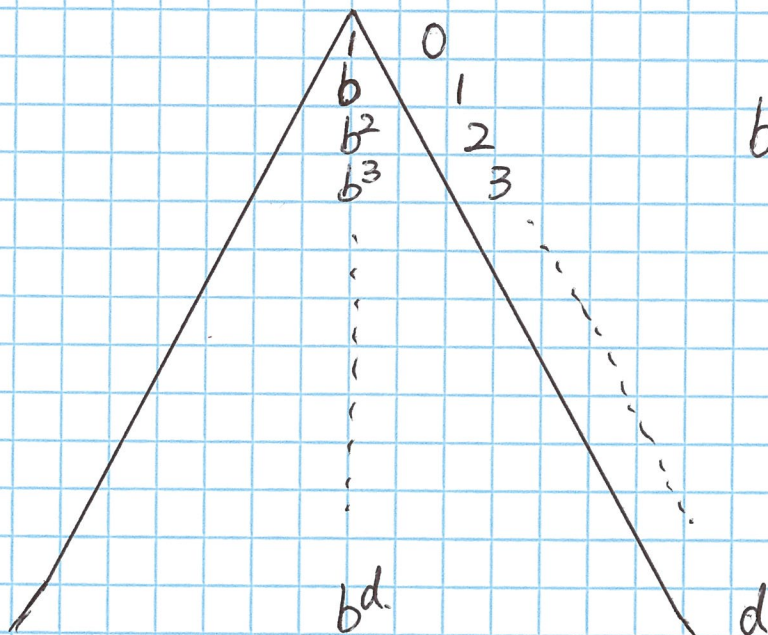
Breadth-First Search on River Crossing.

Mon Sept 17
Lecture 3



Time complexity of BFS

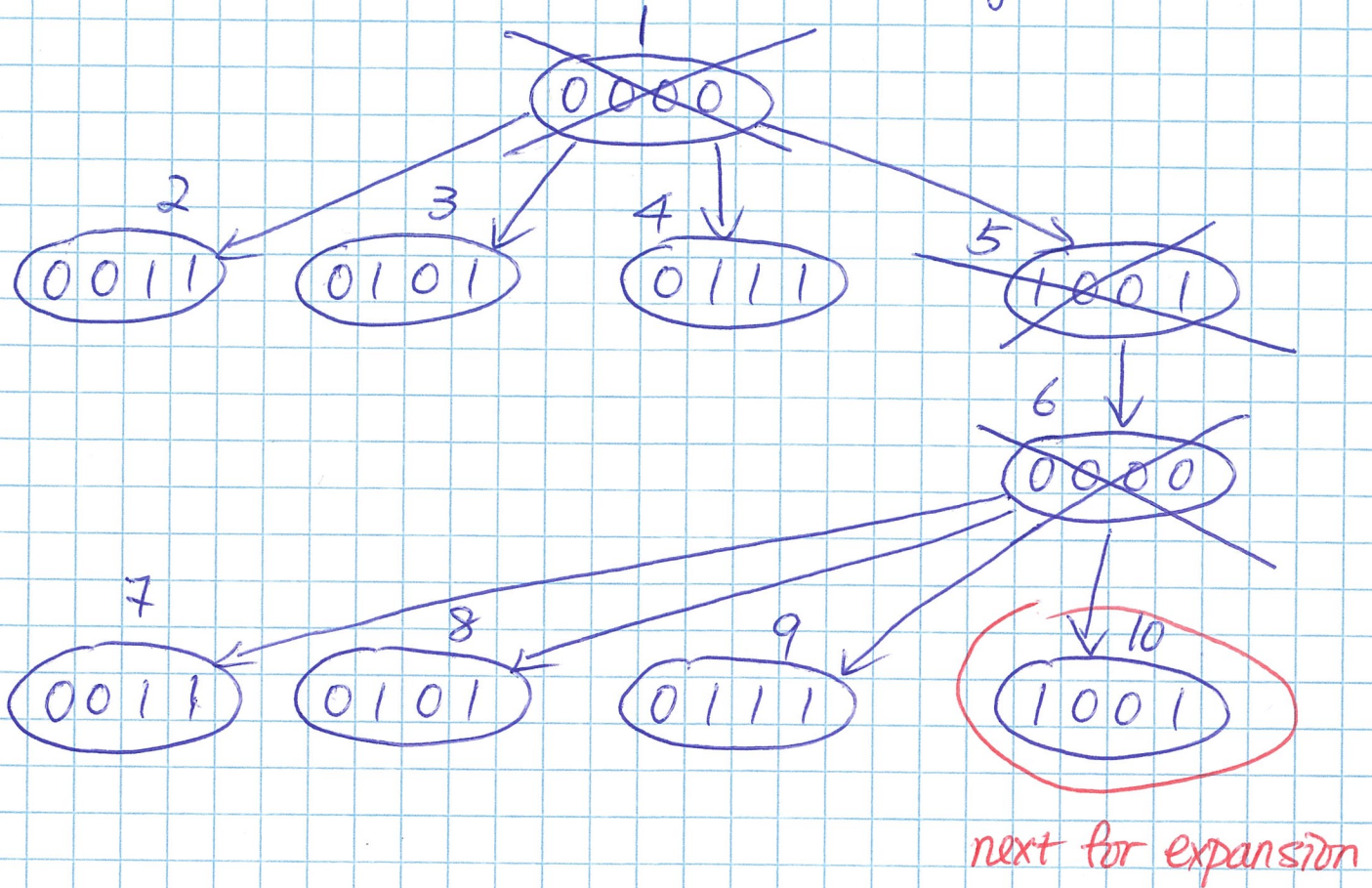
must generate all nodes up to level d in the worst case.



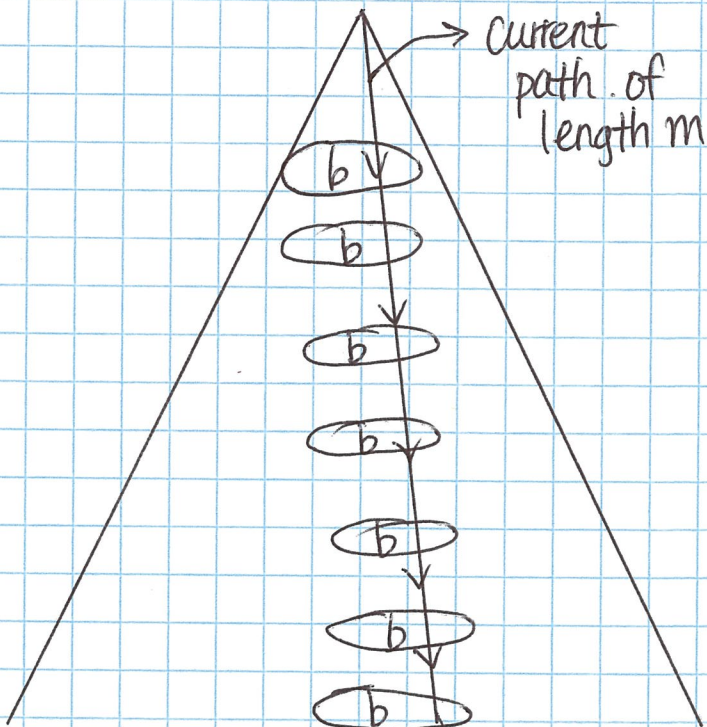
$$b + b^2 + b^3 + \dots + b^d = O(b^d)$$

Depth-First Search on River Crossing.

Mon Sept 17
Lecture 3



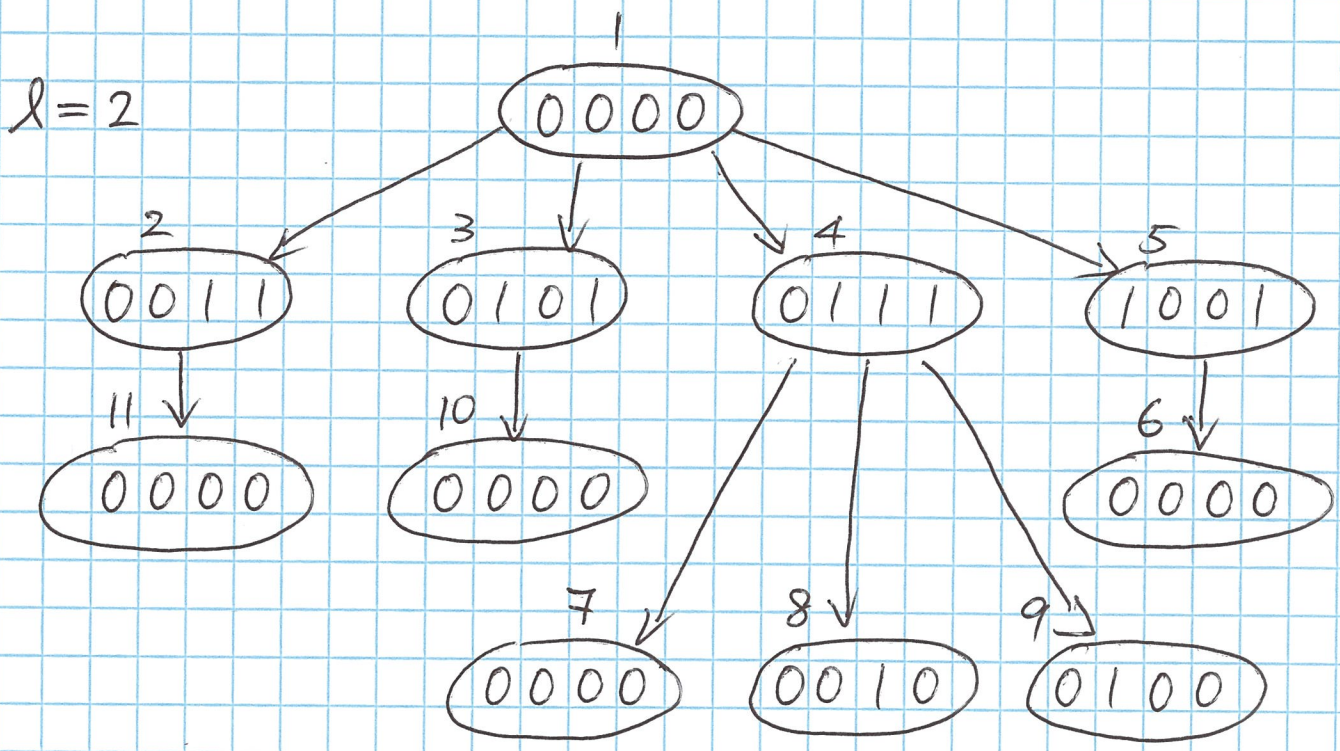
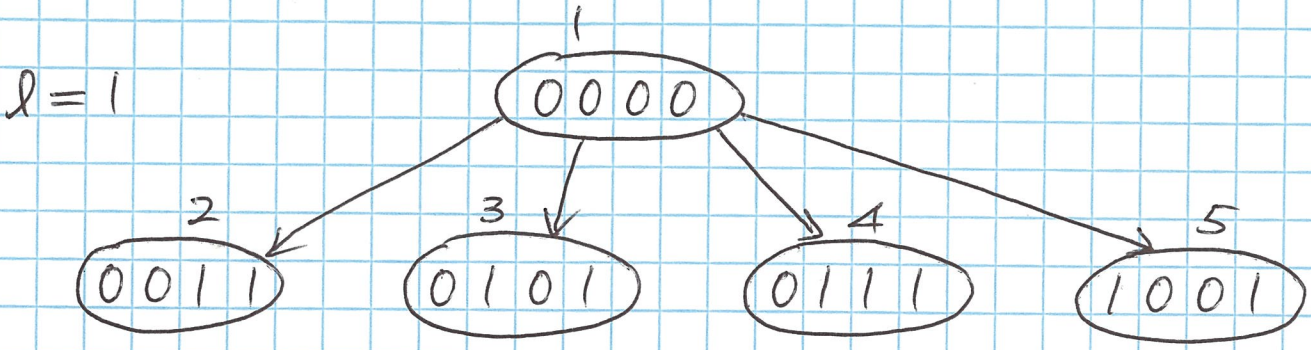
Space complexity of DFS



On the longest possible path w/
 m nodes, must maintain a fringe
of size b for every node.

Space complexity: $O(bm)$

Iterative - Deepening Search on River Crossing. Mon Sept 17 Lecture 3



$l=3$...