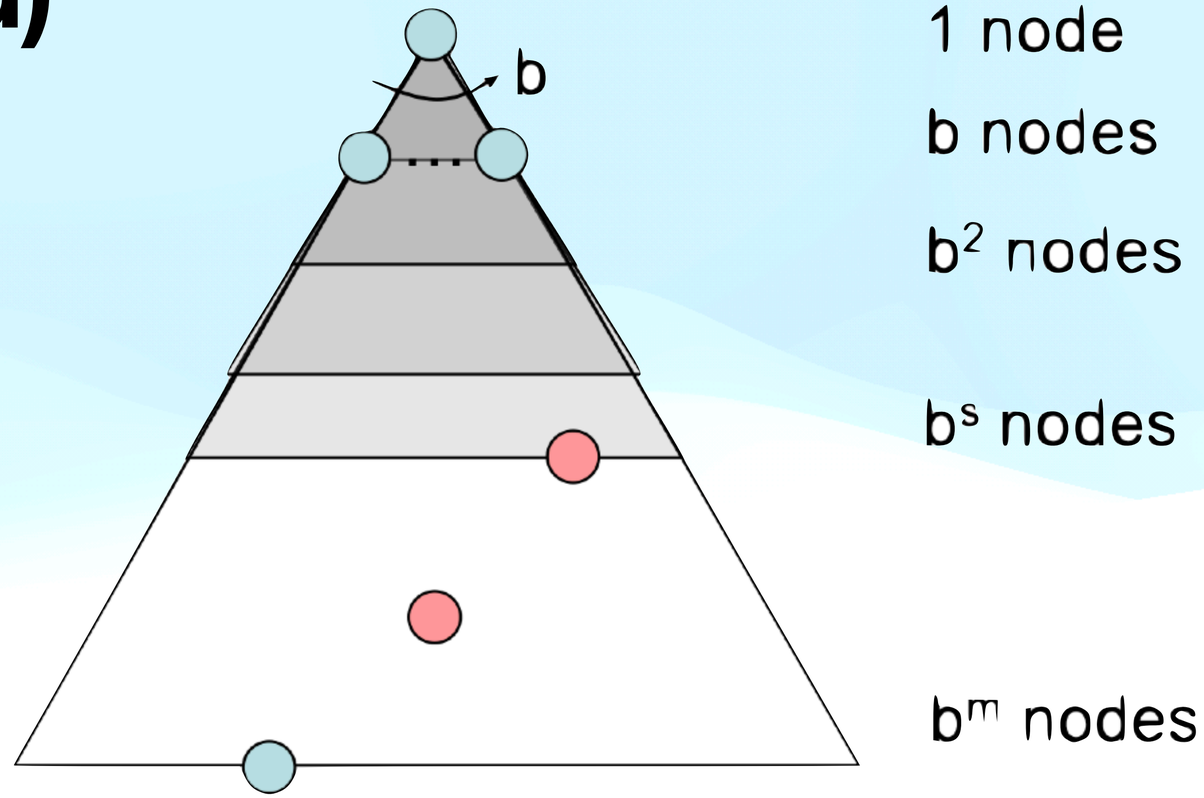
BFS algorithm (cont'd)

- Time Complexity: $\tilde{\mathcal{O}}(b^s)$
  - $\sum_{i=1}^{s} b^i = \tilde{\mathcal{O}}(b^s)$
- Space Complexity: $\tilde{\mathcal{O}}(b^s)$
- Complete
- Optimal: if the step cost is constant



DFS algorithm

Important aspect

- The order of the nodes in fringe **LIFO**
- Should the same state be generated?
  - Same as the EXPANDED states **NO**
  - Same as the states IN fringe **NO (why?)**
- When to report the goal?
  - When generated? **Yes**
  - When Expand that node?