

### 1. BFS Algorithm:

Space Complexity:  $O(b^{(d+1)})$  where  $b$  is the average number of children for each node and  $d$  is the level of tree at which the goal node is present. The maximum possibility of  $b$  is '4'.

### 2. A\* Algorithm:

Space Complexity:  $O(b^{(d+1)})$  where  $b$  is the average number of children for each node and  $d$  is the level of tree at which the goal node is present. The maximum possibility of  $b$  is '4'.

### 3. DFS Algorithm:

Space Complexity:  $O(b^n)$  where  $b$  is the average number of children for each node. The maximum possibility of  $b$  is '4'.