

(4)

## Clone Graph BFS

```

Node cloneBFS (Node n) {
    Queue <Node> q = new LinkedList<>();
    Map <Node, Node> map = new HashMap<>();

    q.add(n);
    map.put(n, new Node(n.val));

    while (!q.isEmpty()) {
        Node source = q.remove();
        for (Node child : source.children) {
            if (map.containsKey(source)) {
                continue;
            }
            Node clone = new Node(child.val);
            map.put(child, clone);
            map.get(source).children.add(clone);
        }
    }
    return map.get(n);
}

```

Navigating Graph using queue.

Keep track of clones in HashMap.

Return map.get(input Node);