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# BFS (Breadth First Search)

Breadth First Search (BFS) is a graph traversal algorithm that explores nodes level by level. It can be implemented in two ways: using a Queue and without using a Queue. In this document, placeholders are provided where you can insert the screenshots of the code.

## 1. BFS with Queue

In this approach, a queue data structure is used to keep track of nodes that need to be visited. This ensures that nodes are processed in the correct breadth-first order.



## 2. BFS without Queue

In this approach, a simple list and indexing can be used to mimic the behavior of a queue. Although not as efficient as a real queue, this method still produces the BFS traversal correctly.

