BFS Algorithm Pseudocode

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BFS (G, s) //Where G is the graph and s is the source node
initialize all distances and predecessors
let Q be queue.
set distance for s to 0
\mathbb{Q}.enqueue( s ) //Inserting s in queue until
mark s as visited. //set distance to 0 and predecessor to it's index
while (Q is not empty)
     //Removing that vertex from queue, whose neighbor will be visited now
     v = Q.dequeue()
     //processing all the neighbors of v
     for all neighbours {\tt w} of {\tt v} in Graph {\tt G}
         if w is not visited
             set distance for w to distance of v + 1
             set predecessor of w to v
             mark w as visited
             \mathbb{Q}.enqueue( \mathbf{w} ) //Stores \mathbf{w} in \mathbb{Q} to further visit its neighbour
```