

BFS Algorithm Pseudocode

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procedure BFS(G,s)

  for each vertex  $v \in V[G]$  do
     $explored[v] \leftarrow \text{false}$ 
     $d[v] \leftarrow \infty$ 
  end for
   $explored[s] \leftarrow \text{true}$ 
   $d[s] \leftarrow 0$ 
   $Q :=$  a queue data structure, initialized with  $s$ 
  while  $Q \neq \phi$  do
     $u \leftarrow$  remove vertex from the front of  $Q$ 
    for each  $v$  adjacent to  $u$  do
      if not  $explored[v]$  then
         $explored[v] \leftarrow \text{true}$ 
         $d[v] \leftarrow d[u] + 1$ 
        insert  $v$  to the end of  $Q$ 
      end if
    end for
  end while
end procedure
```