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/*
  bfs_pseudocode.txt
  Pseudocode for breadth first traversal of a graph

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*/

// Return the set of vertices visited during
// a breadth-first traversal of g, starting at
// startv
set<vertices> bfs(graph g, vertex startv)
{
  queue<vertices> visitQ;
  set<vertices>   visitSet;

  for (each vertex, v, in the graph)
    mark v as UNVISITED;  // WHITE

  visitQ.push(startv);

  while (visitQ is not empty)
  {
    currentV = head of queue; then pop queue;
    mark currentV as VISITED;  // BLACK
    visitSet.insert(currentV);

    neighbors = getNeighbors(currentV);
    for (each neighbor, n, in neighbors)
      if (n is not VISITED and n is not PROCESSED)
        {
          mark n as PROCESSED;  // GREY
          visitQ.push(n);
        }
  } // while

  return visitSet;
}
```