

USE ONE OF THESE ALGORITHMS FOR LAB EXERCISE 11.2

DEPTH FIRST SEARCH TRAVERAL ALGORITHM:

```
DFS( $G, v$ ):  
  label  $v$  as visited  
  for all edges from  $v$  to  $w$  in  $G.\text{adjacentEdges}(v)$  do  
    if vertex  $w$  is not labeled as discovered then  
      recursively call DFS( $G, w$ )  
    end if  
  end for
```

BREADTH FIRST SEARCH TRAVERAL ALGORITHM:

```
BFS( $G, v$ ) :  
  let  $Q$  be a queue  
   $Q.\text{enqueue}(v)$   
  label  $v$  as visited  
  while  $Q$  is not empty  
     $v = Q.\text{dequeue}()$   
    for all edges from  $v$  to  $w$  in  $G.\text{adjacentEdges}(v)$  do  
      if  $w$  is not labeled as visited  
         $Q.\text{enqueue}(w)$   
        label  $w$  as visited  
      end for  
    end while
```