

Algorithm B: This algorithm executes a depth-first search on a graph G beginning at a starting node A .

1. Initialize all nodes to the ready state ($\text{STATUS} = 1$).
2. Push the starting node A onto STACK and change its status to the waiting state ($\text{STATUS} = 2$).
3. Repeat Steps 4 and 5 until STACK is empty.
4. Pop the top node N of STACK . Process N and change its status to the processed state ($\text{STATUS} = 3$).
5. Push onto STACK all the neighbors of N that are still in the ready state ($\text{STATUS} = 1$), and change their status to the waiting state ($\text{STATUS} = 2$).
[End of Step 3 loop.]
6. Exit.

Algorithm A: This algorithm executes a breadth-first search on a graph G beginning at a starting node A .

1. Initialize all nodes to the ready state ($\text{STATUS} = 1$).
2. Put the starting node A in QUEUE and change its status to the waiting state ($\text{STATUS} = 2$).
3. Repeat Steps 4 and 5 until QUEUE is empty:
 4. Remove the front node N of QUEUE. Process N and change the status of N to the processed state ($\text{STATUS} = 3$).
 5. Add to the rear of QUEUE all the neighbors of N that are in the steady state ($\text{STATUS} = 1$), and change their status to the waiting state ($\text{STATUS} = 2$).

[End of Step 3 loop.]
6. Exit.