## Depth First Search

*Description:*

Depth First Search Algorithm is just as the name of the algorithm: as long as possible, if there exists node.

*Phase 1:*

Depth First Search Algorithm would search from the starting edge of the Latest Found Node v, until Each Edge of the node has been found. The process finished.

*Phase 2:*

Once all starting edges of the node v have been visited, the search process would return back to the precursor node of the node v to find the starting edges of the priority node.

*Phase 3:*

As long as all precursor nodes of the current node have been visited, then if there still has some other unfounded nodes, then Depth First Search Algorithm would pick up a random node from all unfounded nodes as the new node, and to repeat the same query process. The Depth First Search Algorithm would repeat, until all nodes in the Graph have been visited.

*Rule:*

*Example:*

*Code:*