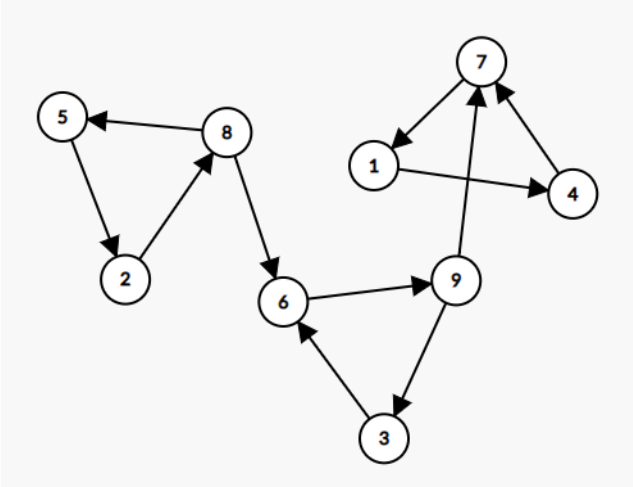
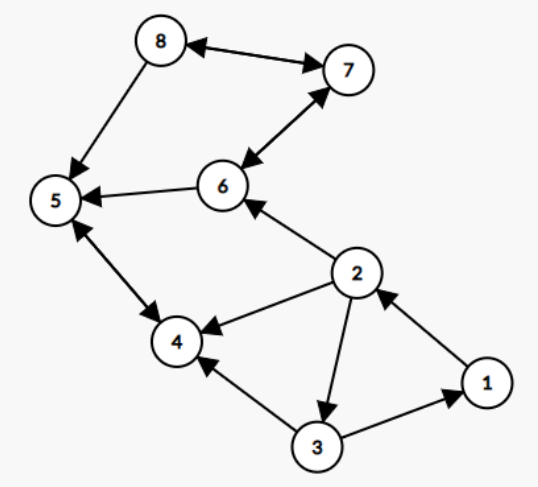
https://csacademy.com/app/graph_editor/

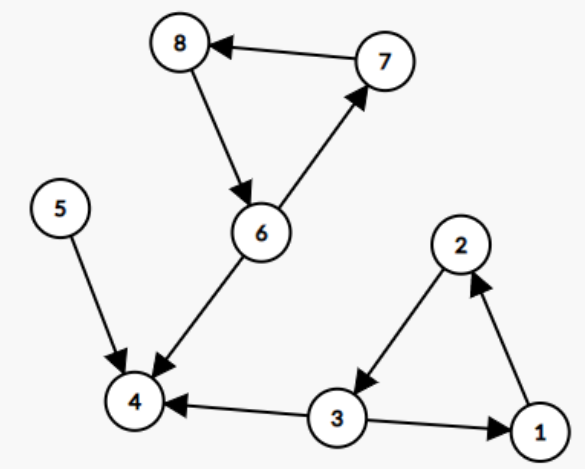
Test 1



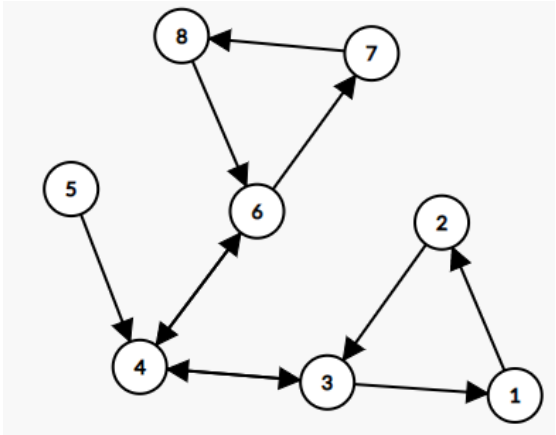
Test 2



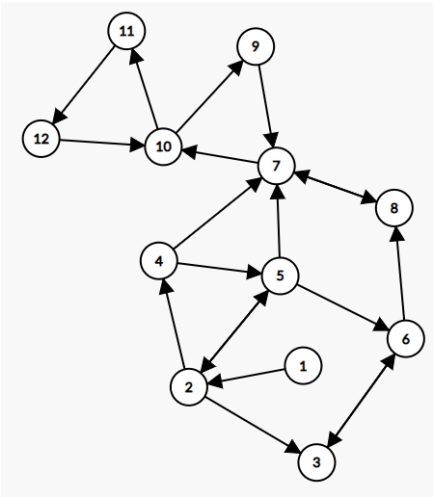
Test 3



Test 4



Test 5

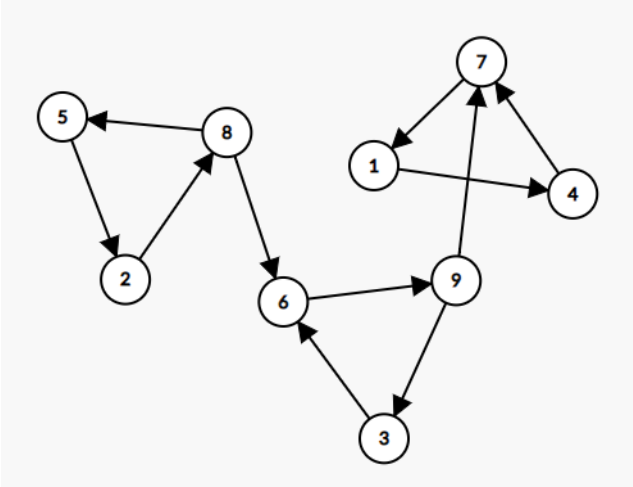


BFS/DFS Accessibility Tests

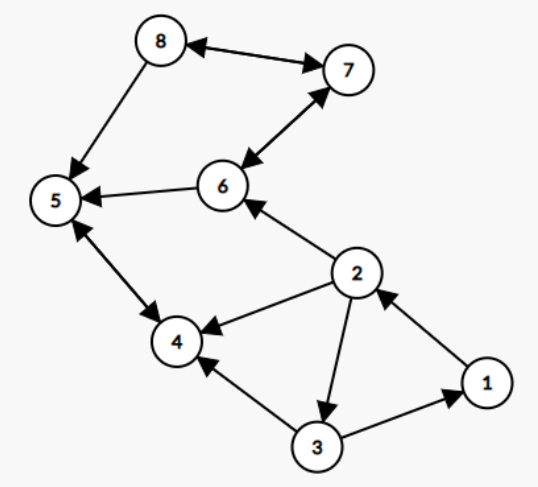
Test	Source	Accessible
1	6	{1, 3, 4, 6, 7, 9}
1	5	{1, 2, 3, 4, 5, 6, 7, 8, 9}
3	4	{4}
4	4	{1, 2, 3, 4, 6, 7, 8}
5	1	{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

https://csacademy.com/app/graph_editor/

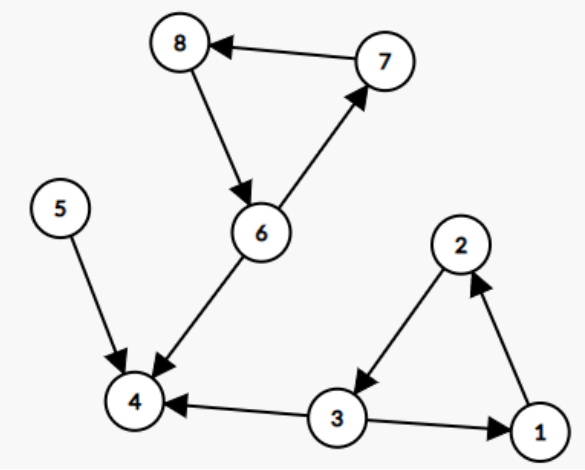
Test 1



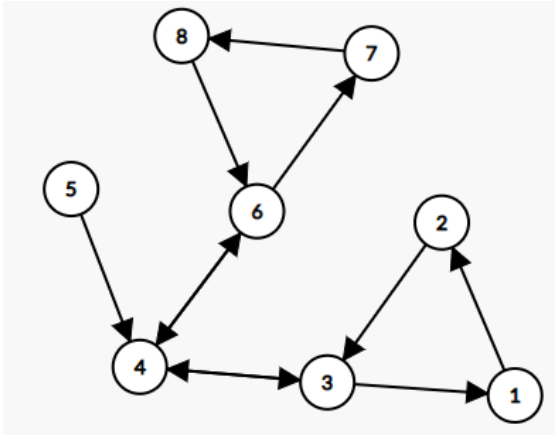
Test 2



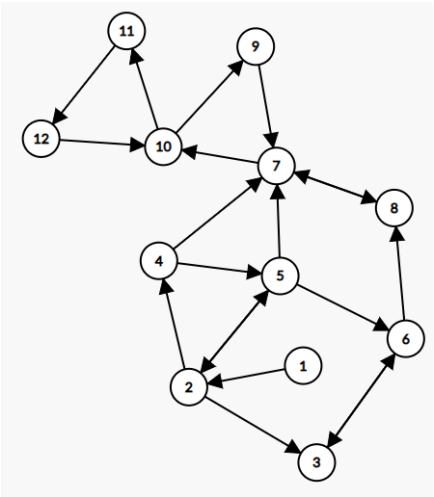
Test 3



Test 4



Test 5

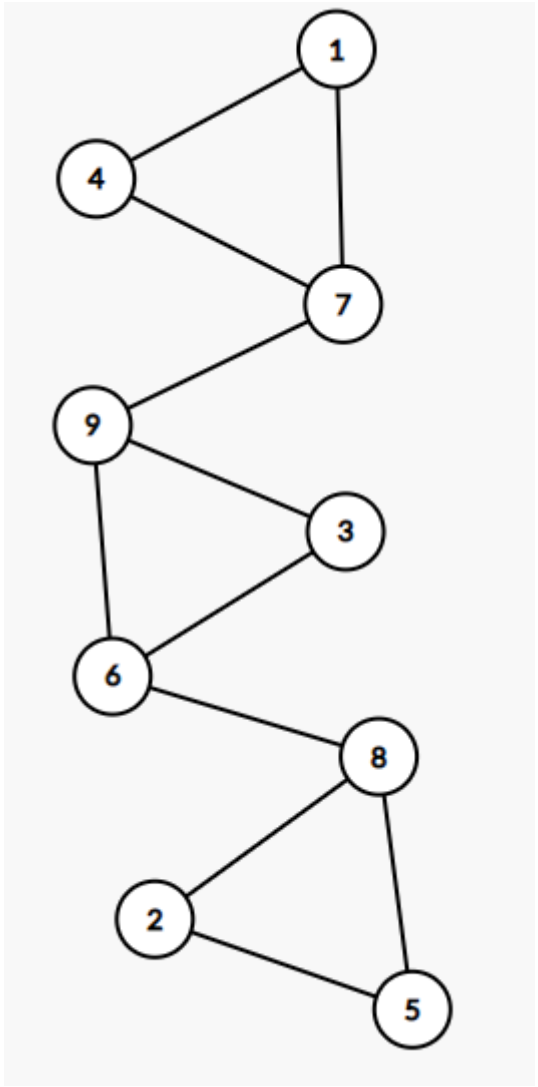


BFS Distance Tests

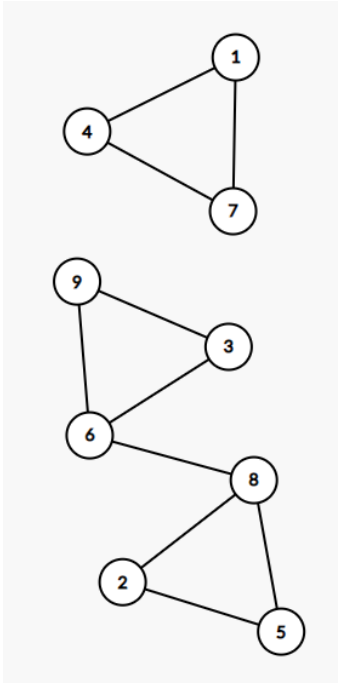
Test	Source	Accessible
1	6	{1:3, 3:2, 4:4, 6:0, 7:2, 9:1}
1	5	{1:6, 2:1, 3:5, 4:7, 5:0, 6:3, 7:5, 8:2, 9:4}
3	4	{4:0}
4	4	{1:2, 2:3, 3:1, 4:0, 6:1, 7:2, 8:3}
5	1	{1:0, 2:1, 3:2, 4:2, 5:2, 6:3, 7:3, 8:4, 9:5, 10:4, 11:5, 12:6}

Note: Undirected UCC Tests https://csacademy.com/app/graph_editor/

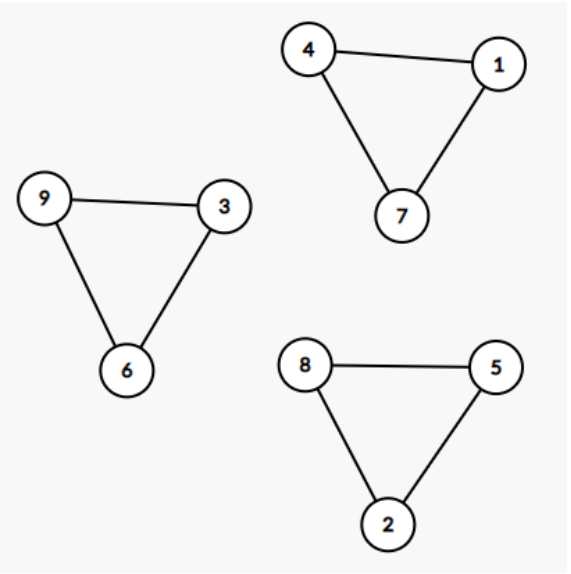
Test 1



Test 1.mod_1



Test 1.mod_2

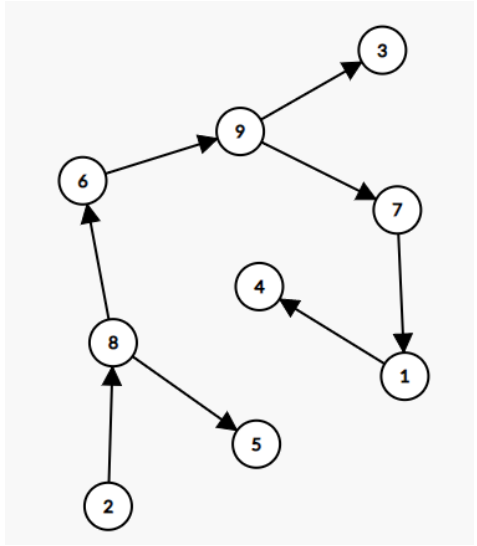


BFS Undirected UCC Tests

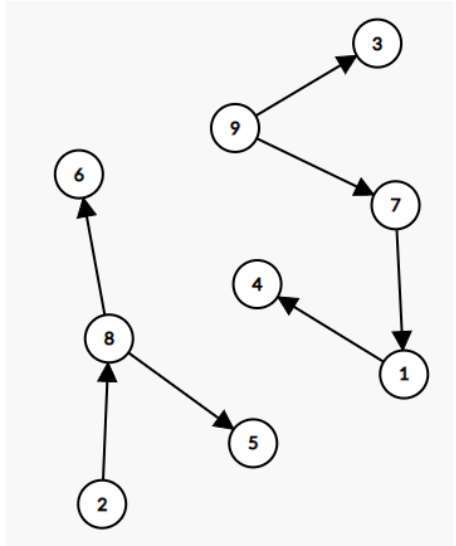
Test	Accessible
1	{1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0}
1.mod_1	{1:0, 4:0, 7:0, 2:1, 3:1, 5:1, 6:1, 8:1, 9:1}
1.mod_2	{1:0, 4:0, 7:0, 2:1, 5:1, 8:1, 3:2, 6:2, 9:2}

Note: Topological Ordering (DAGs) https://csacademy.com/app/graph_editor/

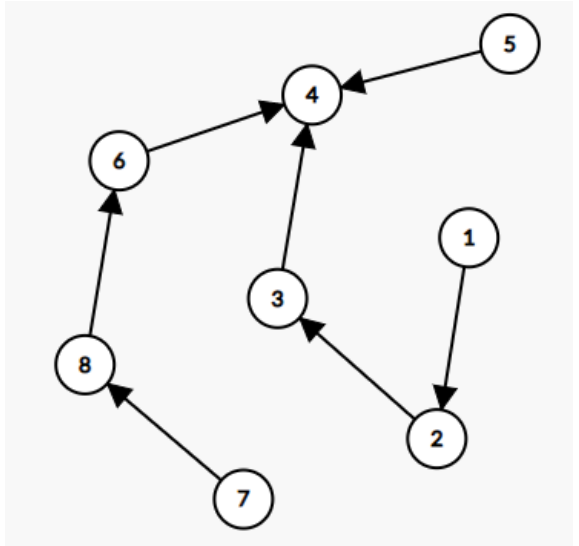
Test 1.mod_3



Test 1.mod_4



Test 3.mod_1



DFS Topo Sort Tests

Programmatic testing is easy. Iterate over all edges and confirm that source vertex has lower order than the sink vertex.