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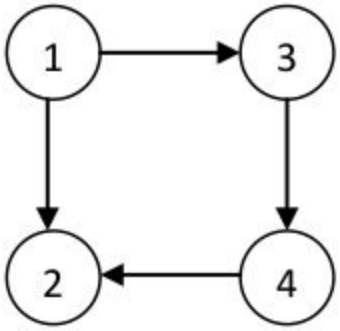
E/16/083

# CO322 – LAB 05

1. Find out what is the Transitive Closure of a graph.

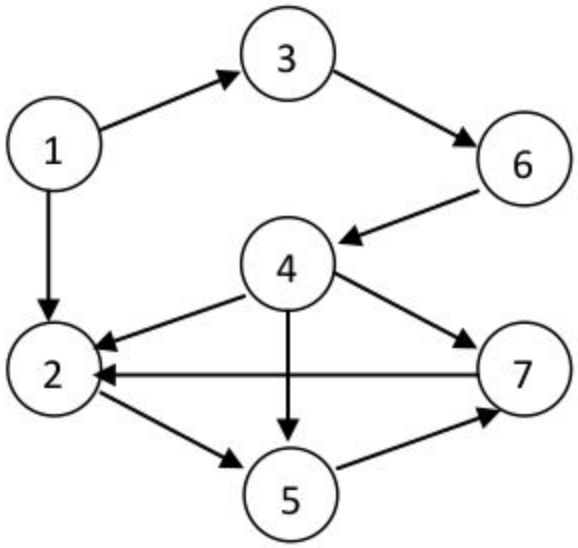
Given a directed graph, find out if a vertex j is reachable from another vertex i for all vertex pairs (i, j) in the given graph. Here reachable mean that there is a path from vertex i to j. The reach-ability matrix is called transitive closure of a graph.

2. Manually compute the Transitive Closure for the following graph:




1 1 1 1
0 1 0 0
0 1 1 1
0 1 0 1

**3.** Based on the Graph Traversal algorithm discussed in the class, write a C program to compute and print the Transitive Closure of a given graph. Use the following graph to test your program:




Please find **tc.c**