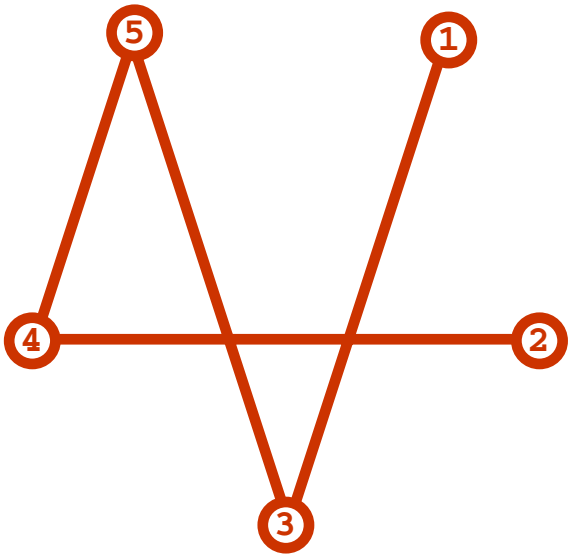


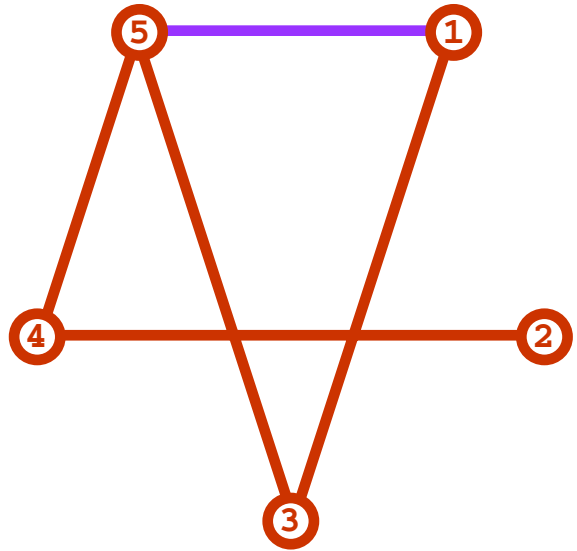
Warshall's Algorithm

The nodes are processed one by one. When node i is processed, new edges are added in order that every pair of nodes adjacent to i (in the current graph, not the original graph) be joined by an edge.

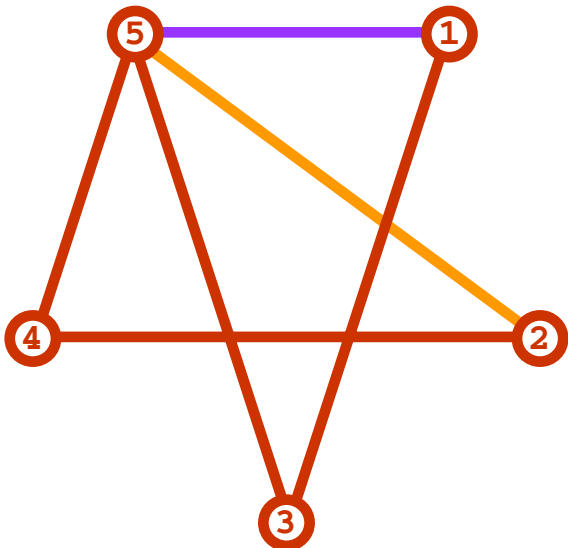
This is the original graph. When node 1 and node 2 are processed, nothing happens because fewer than two edges are incident to node one and node 2.



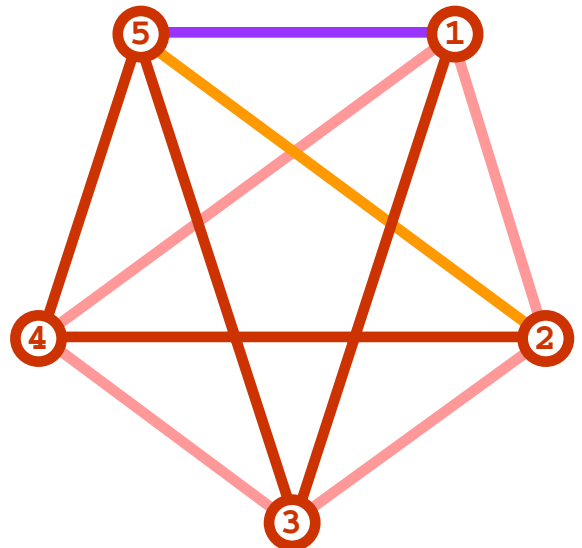
When node 3 is processed, a new edge must be added to join nodes 1 and 5 because both are adjacent to node 3.



When node 4 is processed, a new edge must be added joining nodes 2 and 5 because both of these nodes are adjacent to node 4.



When node 5 is processed, four new arcs must be added because 1 and 2 are adjacent to 5, 2 and 3 are adjacent to 5, 3 and 4 are adjacent to 5, and 4 and 1 are adjacent to 5.



We end up with a complete graph. This is because the original graph was connected.