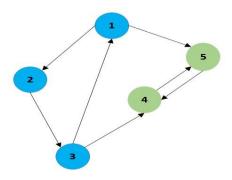
Computer Systems Lab

Assignment-4

Date of Assignment: 24-Sept-2020 Date of Submission: 30-Sept-2020

A directed graph is strongly connected if there is a path between all pairs of vertices. A strongly connected component (SCC) of a directed graph is a maximal strongly connected subgraph. For example, there are two SCCs in the following graph.



Given a directed graph, write a program that prints the number of SCCs in the graph. Also it prints vertices in each component. Print the component graph (use topological sort).



Input:

Number of Vertices = 5

Number of Edges = 7

- 1 2
- 2 3
- 1 5
- 3 1
- 3 4
- 4 5

Output:

Component 1: 1 2 3 Component 2: 4 5

Component 1 _____ Component 2

Submission Instruction:

File Name: A4_Your Roll Number.c/cpp (A4_20CS06002.c or A4_20CS06002.cpp)

Mail to: joy@iitbbs.ac.in

Subject Line: A4_20CS06002