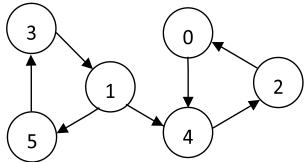
## Lab 8

## Problem Description:

Write a Java program that receives a directed graph as input and determines the strongly connected components. A directed graph is strongly connected if there is a path between all pairs of vertices.



<u>Input:</u> The first two lines of input determines number of vertices V and number of edges E, respectively in the graph. The next E lines indicate the connectivity between vertices.

<u>Output</u>: Output will show the strongly connected components in input graph as given in the test case format. The components themselves must be sorted.

| Test Case | Input | Output    |
|-----------|-------|-----------|
| 1         | 6     | [1, 3, 5] |
|           | 7     | [0, 2, 4] |
|           | 14    |           |
|           | 15    |           |
|           | 0 4   |           |
|           | 4 2   |           |
|           | 31    |           |
|           | 5 3   |           |
|           | 20    |           |
| 2         | 7     | [0] [1]   |
|           | 10    | [2]       |
|           | 23    | [3, 5, 6] |
|           | 0 2   | [4]       |
|           | 63    |           |
|           | 12    |           |
|           | 3 4   |           |
|           | 3 5   |           |
|           | 0 1   |           |
|           | 1 3   |           |
|           | 0 3   |           |
|           | 5 6   |           |