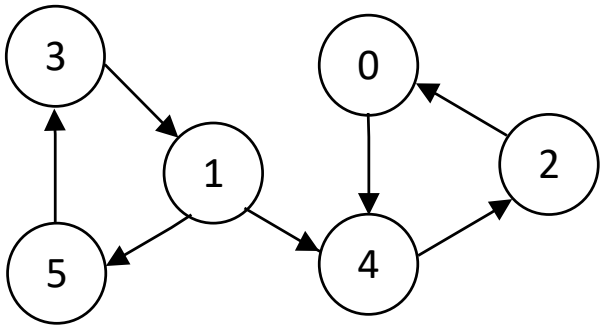
# Lab 6

## 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.




**Input:** 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.

**Output:** 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<br>7<br>2 0<br>0 4<br>4 2<br>1 4<br>1 5<br>3 1<br>5 3 | [1, 3, 5]<br>[0, 2, 4] |
| 2 | 7<br>10<br>2 3<br>0 2<br>6 3<br>1 2<br>3 4<br>3 5<br>0 1<br>1 3<br>0 3<br>5 6 | [0]<br>[1]<br>[2]<br>[3, 5, 6]<br>[4] |