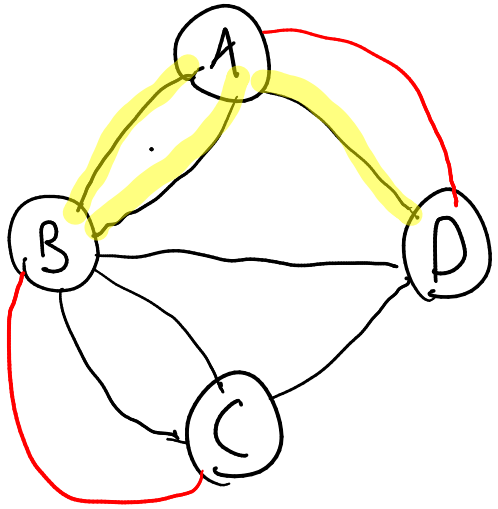
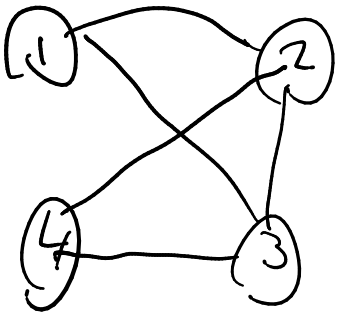
Revisit of the bridges problem



Data structure:-

Undirected Network



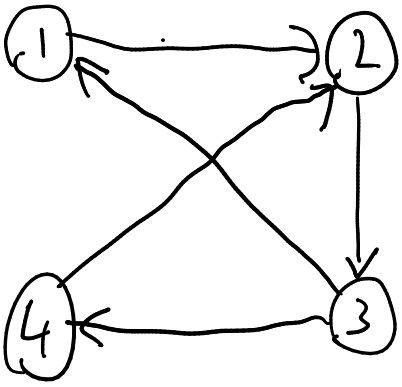
Adjacency Matrix

$$A = \{(1,2), (2,3), (2,4), (3,1), (4,3)\}$$

$$\text{Adj Mat} = \begin{bmatrix} 0 & 1 & 1 & 0 \\ 1 & 0 & 1 & 1 \\ 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 0 \end{bmatrix} \begin{matrix} 2 \\ 3 \\ 3 \\ 2 \end{matrix}$$

$$2 \quad 3 \quad 3 \quad 2$$

Directed



$$AdjM = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 \end{bmatrix}$$

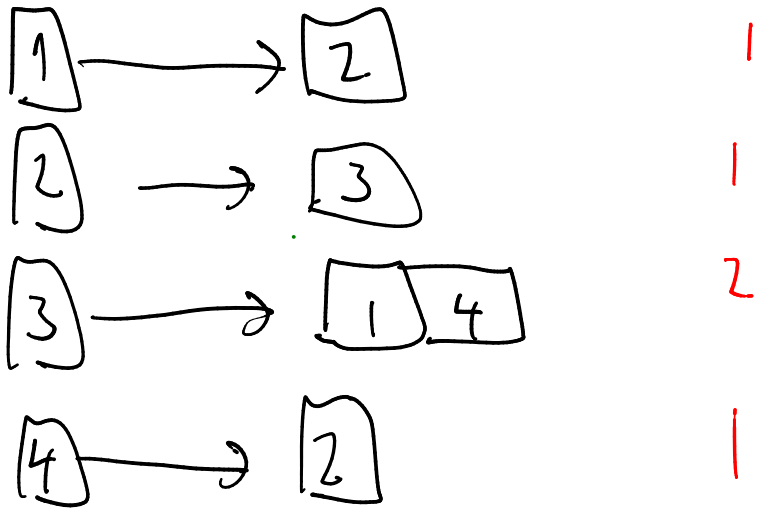
Row sums (outdegree): 1, 1, 2, 1

Column sums (indegree): 1, 2, 1, 1

indegree & outdegree

Adjacency list

Forward



1

1

2

1