Instructions on how to run the code

1. Identify the number of joints/nodes (n).
2. Write the nodes/joints coordinates in a 2-d matrix (nx2) named node_matrix, starts from the pin joint and always forms a closed loop.
3. Write the load forces in a 2-D matrix (nx2) named as node_load which represents the external loads on nodes/joints.
4. Write the nodes constraints in a 2-D matrix (nx2) as 0 (represents the restriction in a direction) and 1 (represents the free movement in a direction) for the nodes.
5. Write the adjacency_matrix (nxn) with 0 (represent no connection between i-th and j-th nodes) and 1 (represents a connection between i-th and j-th nodes).
6. After writing all the parameters, run the python file.
7. Output file is coefficient matrix of (2nx2n) matrix along with the (2nx1) matrix representing member forces and reaction forces. The (2nx1) matrix is such that it represents the forces starting from the pin joint and moves in a circular loop, if any node has reaction forces, first reaction force in x- direction, then in y-direction and then member forces are there in matrix.