Louvain community detection:

python3 louvaineCommunityDetection.py networkEdgesFile

Normalized Mutual Information with Randomization

python3 -W ignore normalizedMutualInformation.py networkGroups.txt Randomize randomNodeIds.txt generatedLouvainGroups

Normalized Mutual Information with no Randomization

python3 -W ignore normalizedMutualInformation.py networkGroups.txt noRandomize generatedLouvainGroups

- networkGroups.txt: the original communities of the network
- generatedLouvainGroups: the detected communities on the generated network
- NMI: will measure the similarity between those generated groups and the original groups