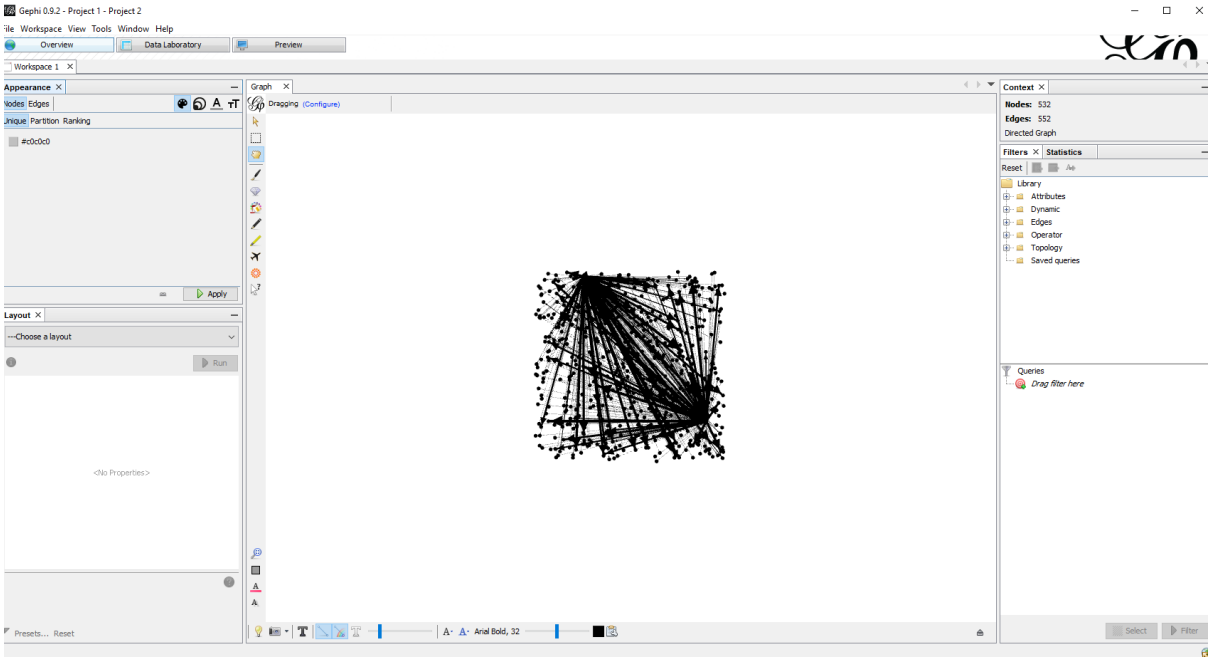
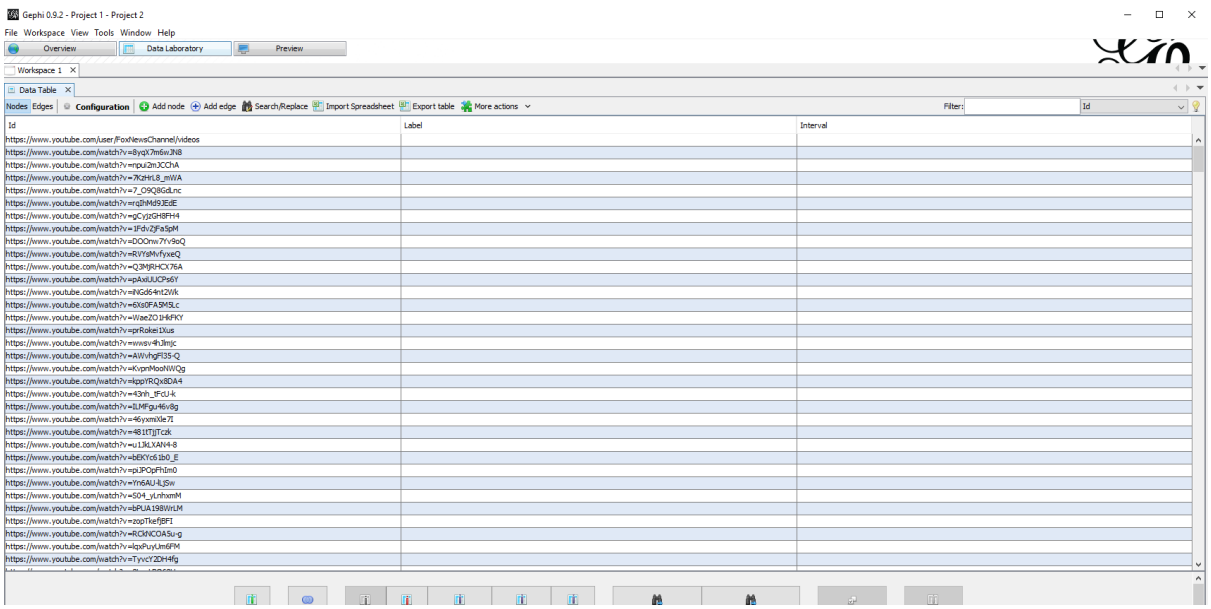
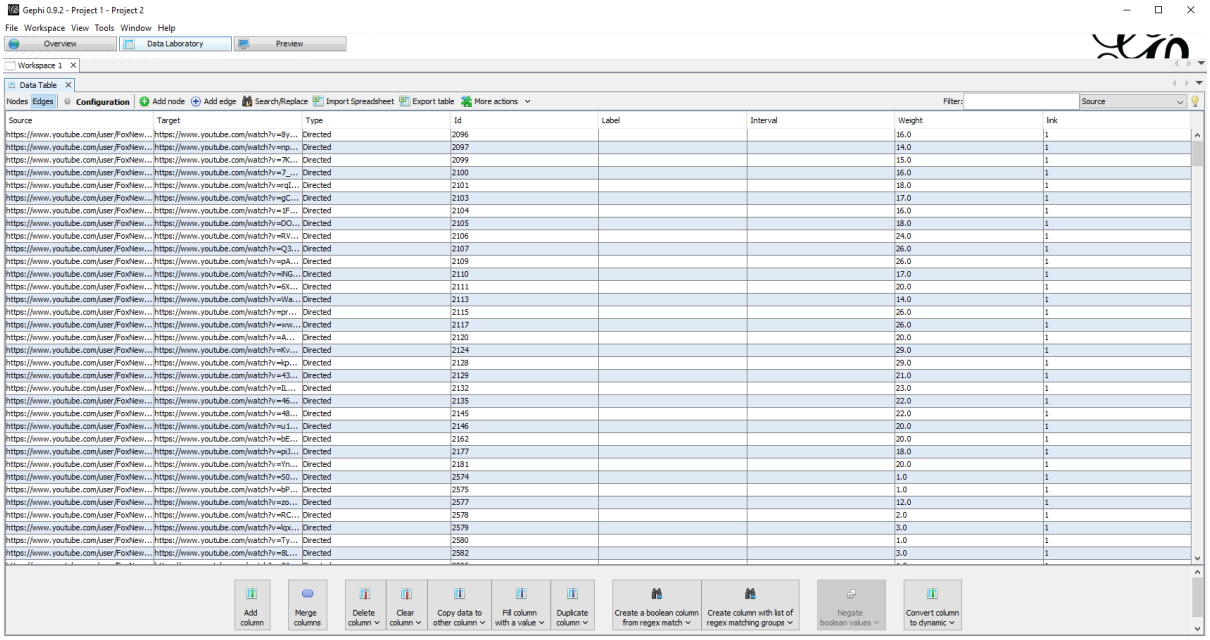
T.M.Fajar Pramudya

1301172735

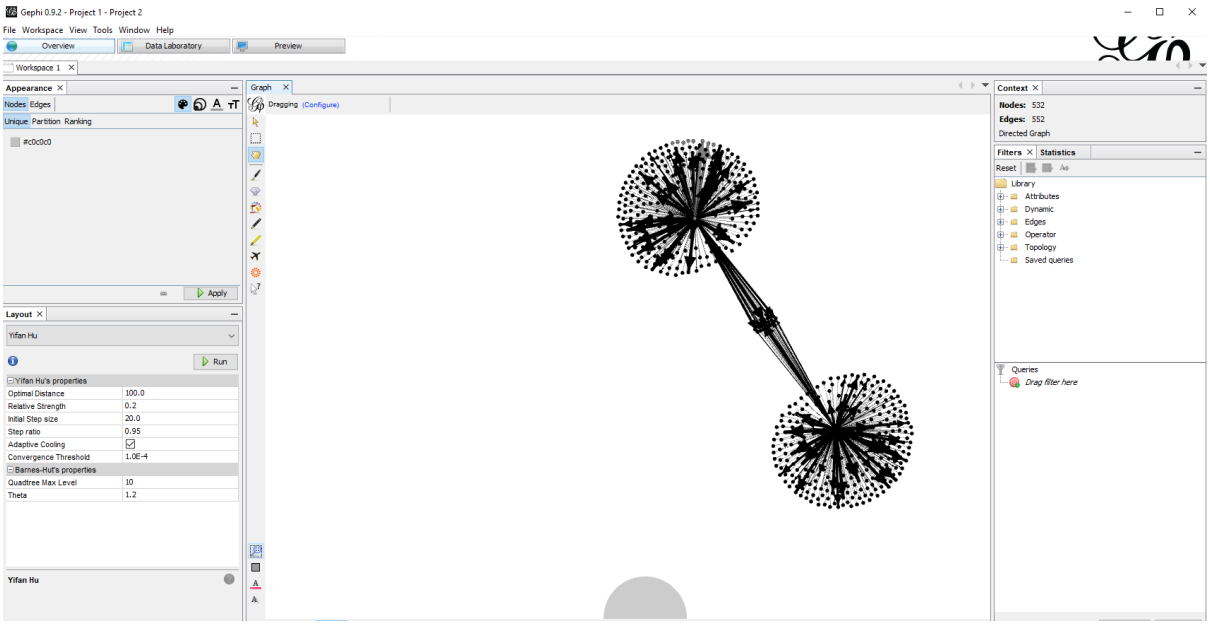
Q1. Please upload the dataset in Gephi format.





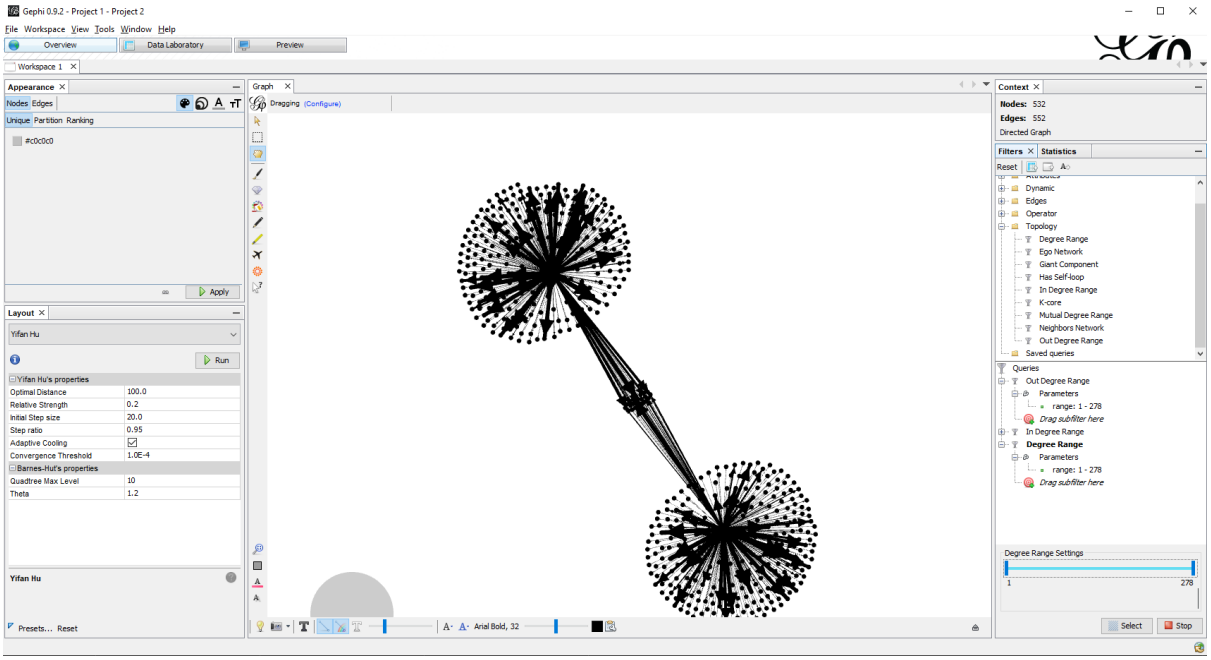


Q2. Upload a screenshot of your "Overview" tab in Gephi, which shows your network after you ran the "Yifan Hu" Layout algorithm

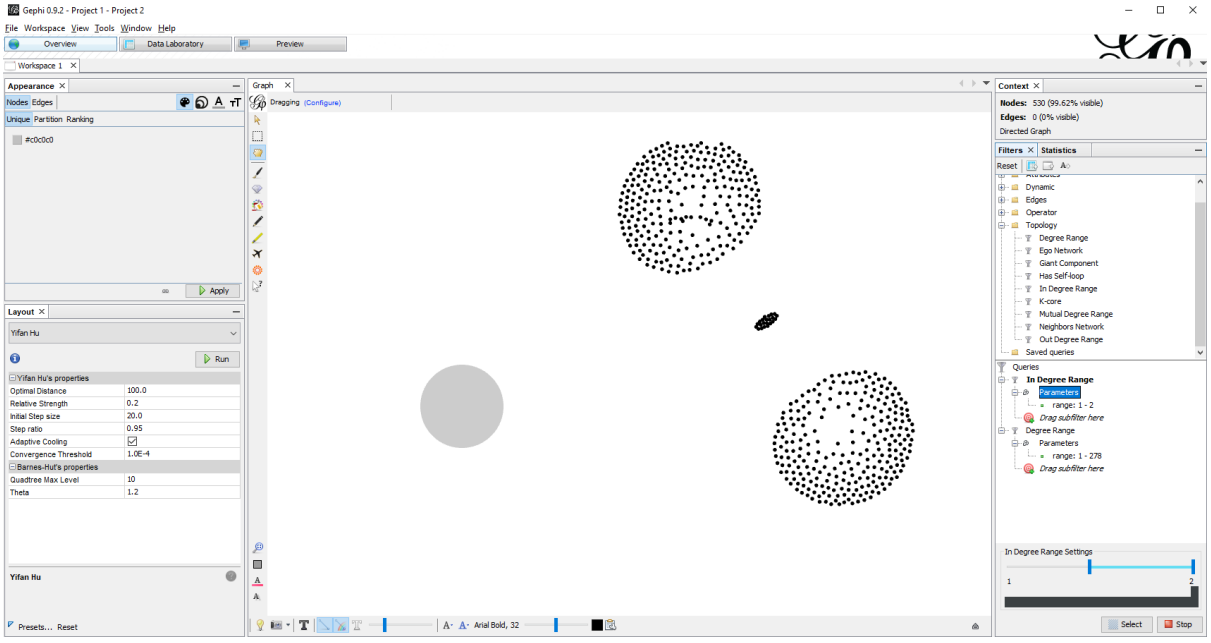


Q3. Calculate the average Degree of your network. Display and analyze all three resulting network measures:

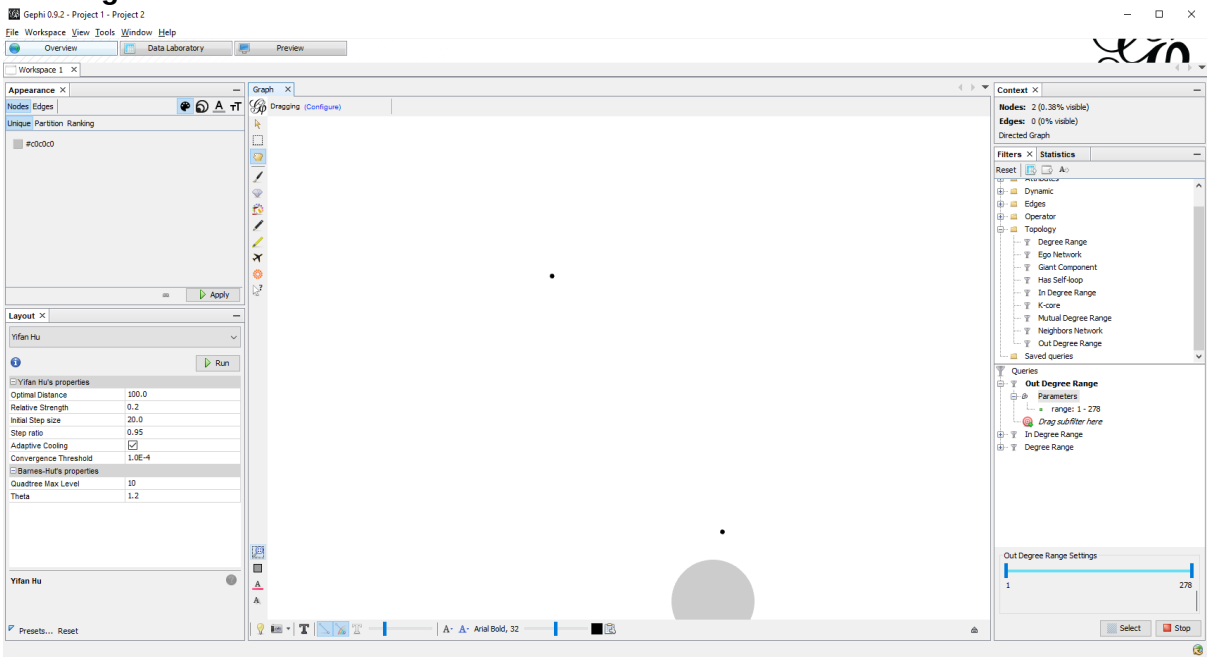
a. Degree



b. In-Degree



c. Out-Degree

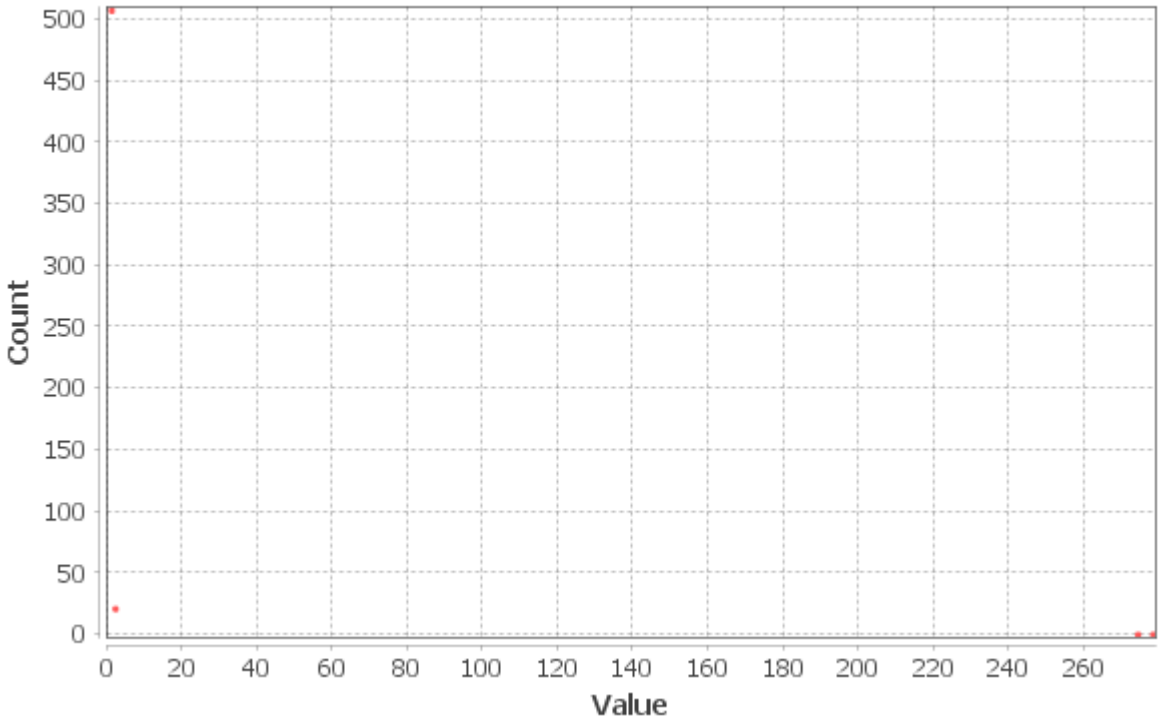


Degree Report

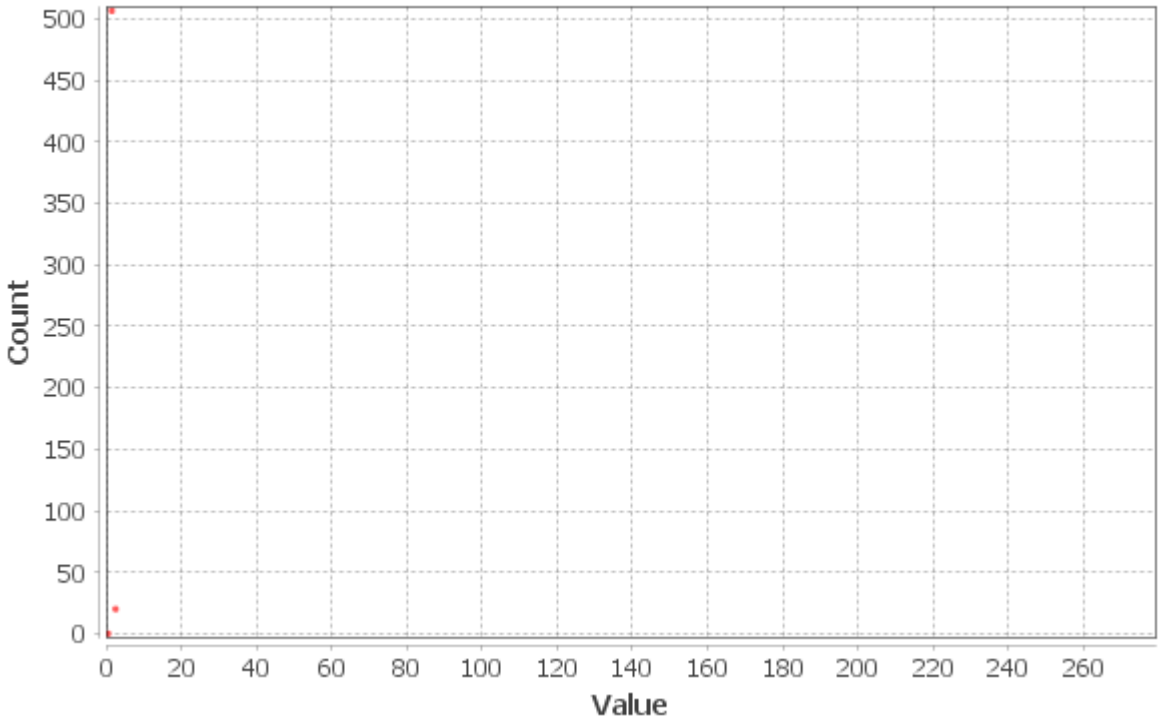
Results:

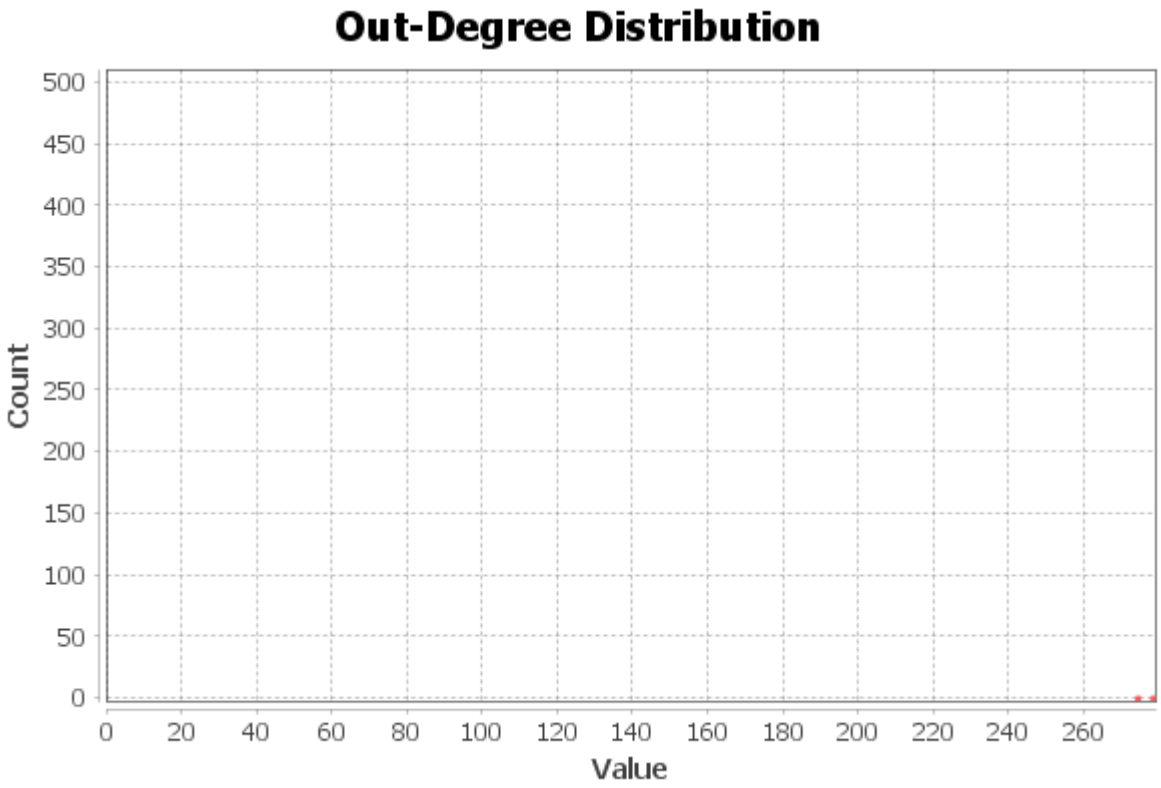
Average Degree: 1.038

Degree Distribution



In-Degree Distribution





Graph Distance Report

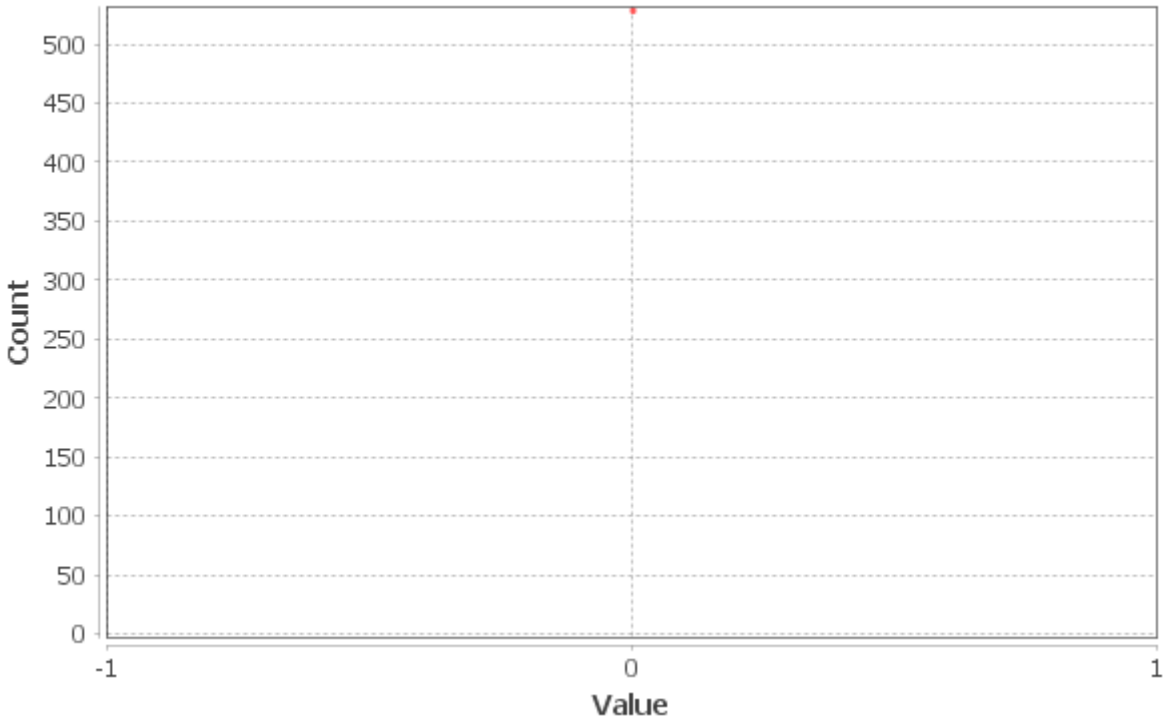
Parameters:

Network Interpretation: undirected

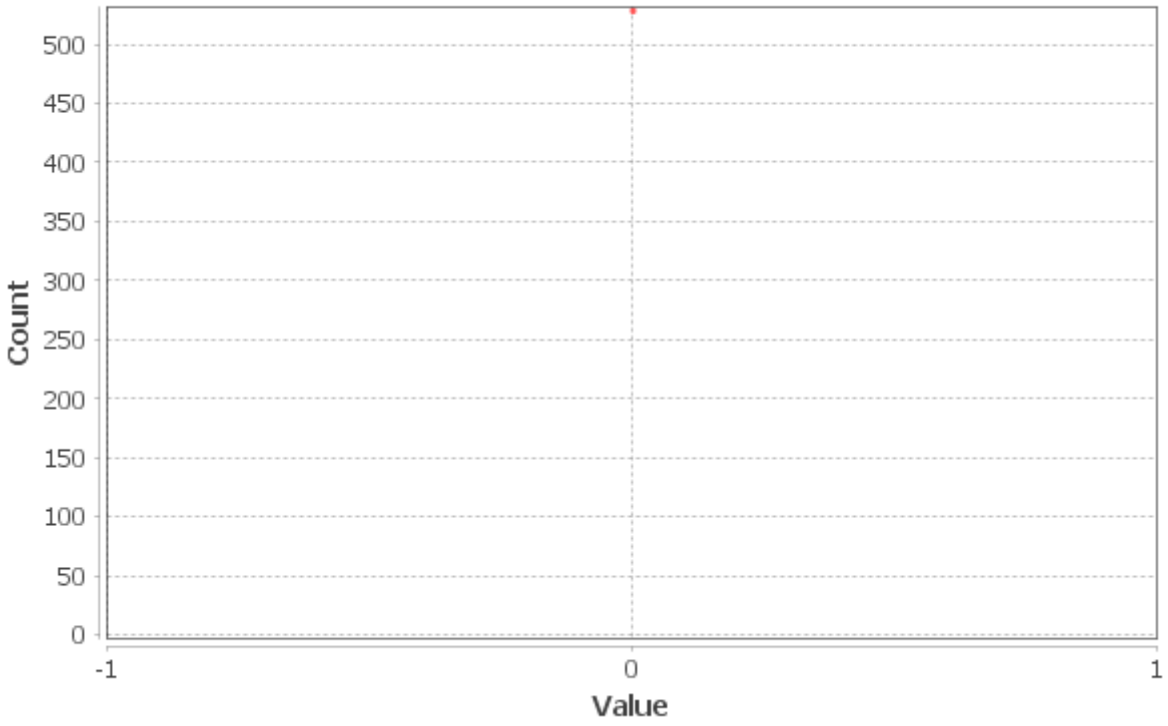
Results:

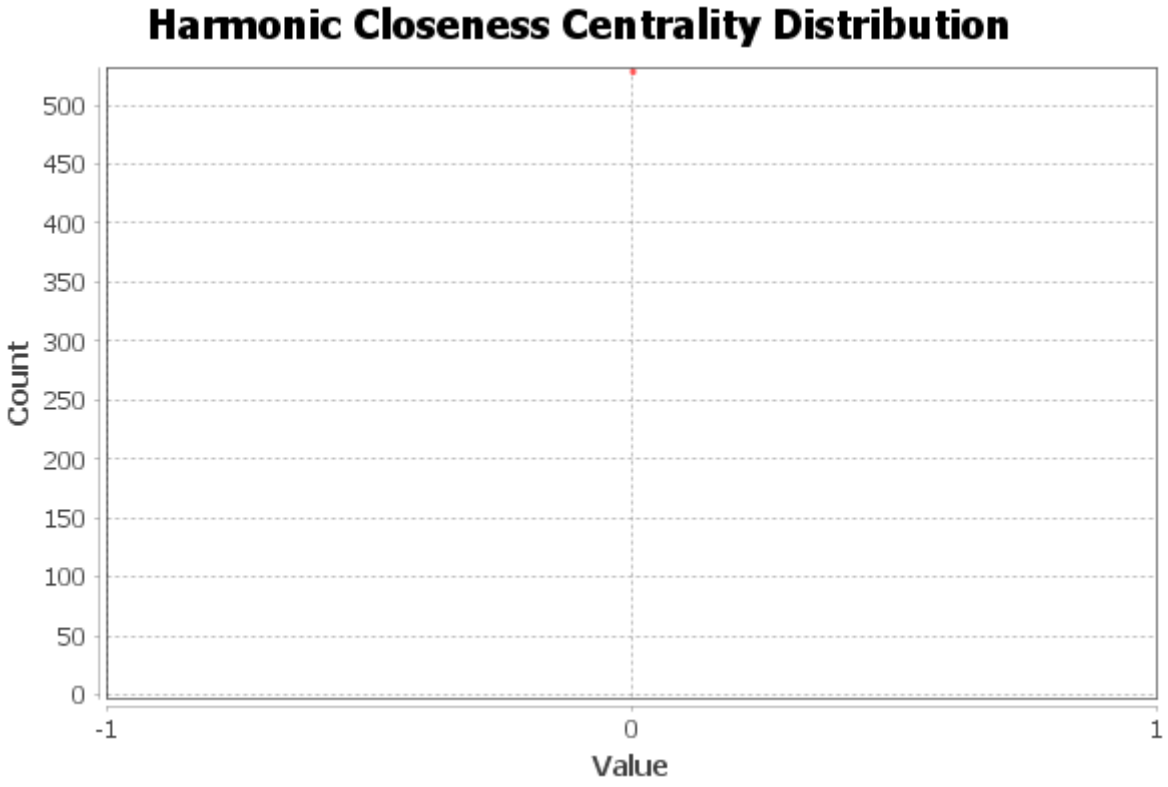
Diameter: 0
Radius: 0
Average Path length: NaN

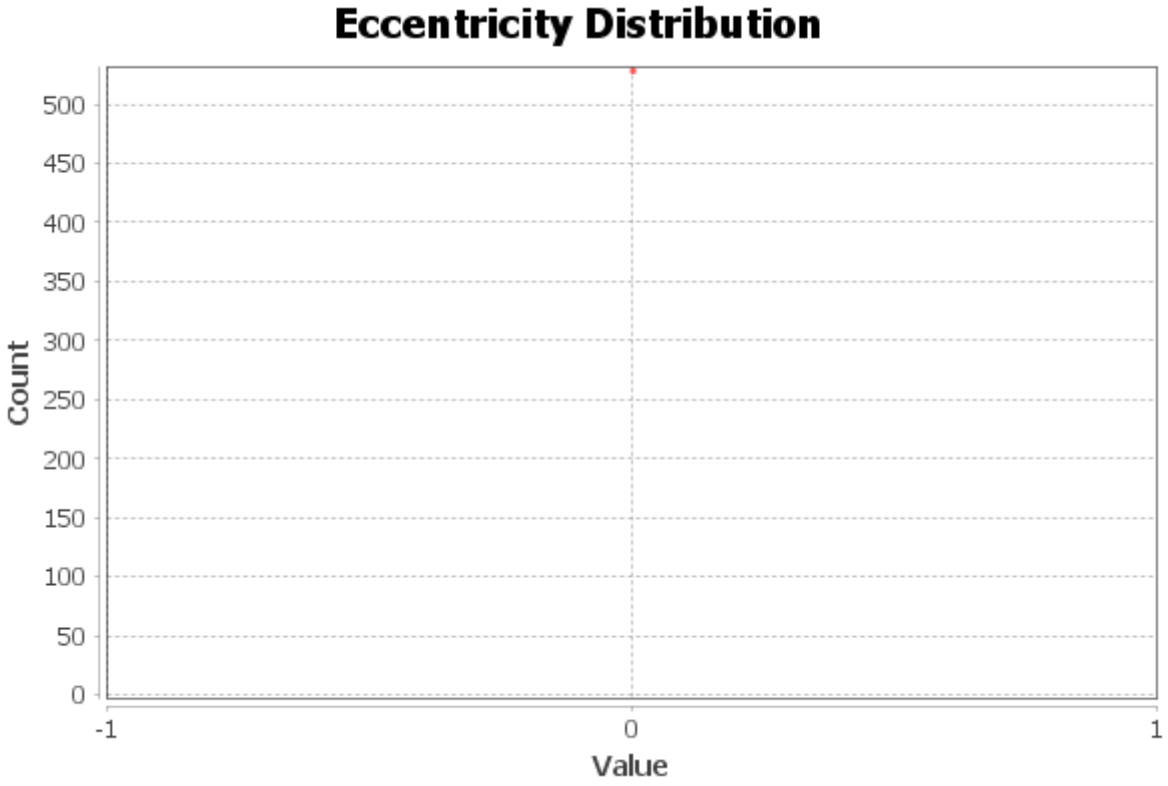
Betweenness Centrality Distribution



Closeness Centrality Distribution







Algorithm:

Ulrik Brandes, *A Faster Algorithm for Betweenness Centrality*, in Journal of Mathematical Sociology 25(2):163-177, (2001)

Answer the following questions:

a. What is the difference between them?
   Pada in degree terdapat 530 nodes dan 0 edges, sedangkan pada out degree terdapat 2 nodes dan 0 edges.
b. How many categories do you get for each?
   4

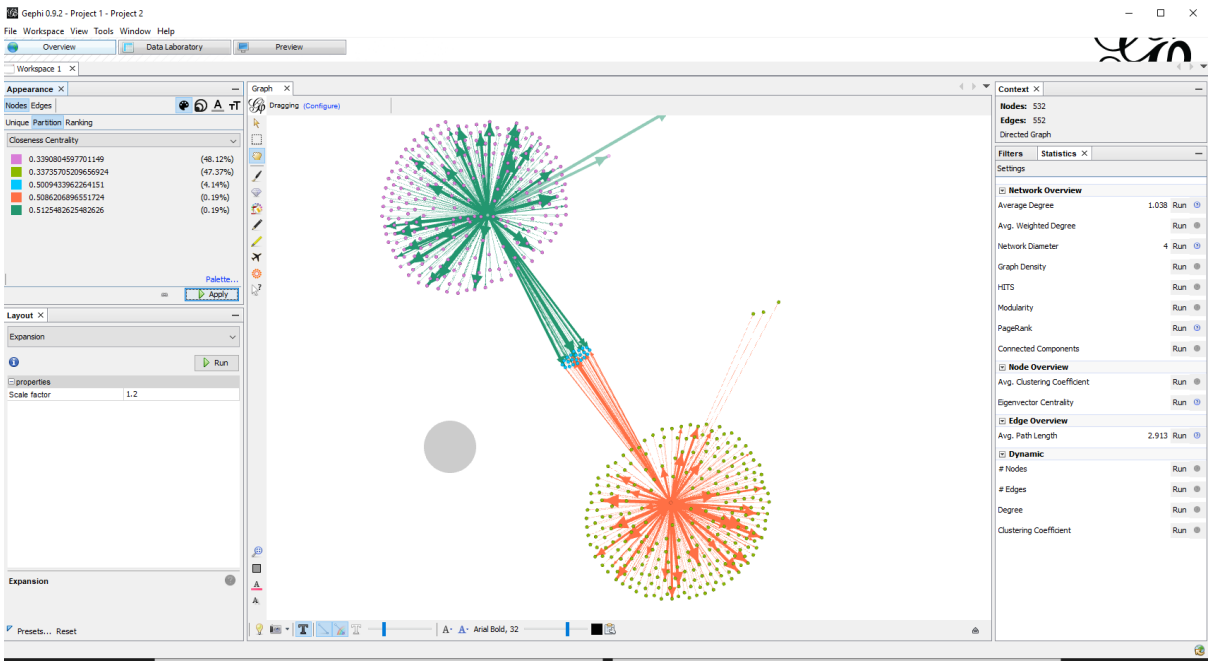
c. Can you make sense of the numbers the indicate the number of degree per category for each of the three measures? Why or why not?
   Tidak, saya masih bingung dalam menunjukkan jumlah derajat perkatagori

Q4. How many nodes/videos are shared by both YouTube channels?

Count them or calculate them

532

Q5. Calculate the "Undirected Closeness Centrality" for your network, through "Average Path Length" and then answer the questions:



a. How many groups of nodes do you get?

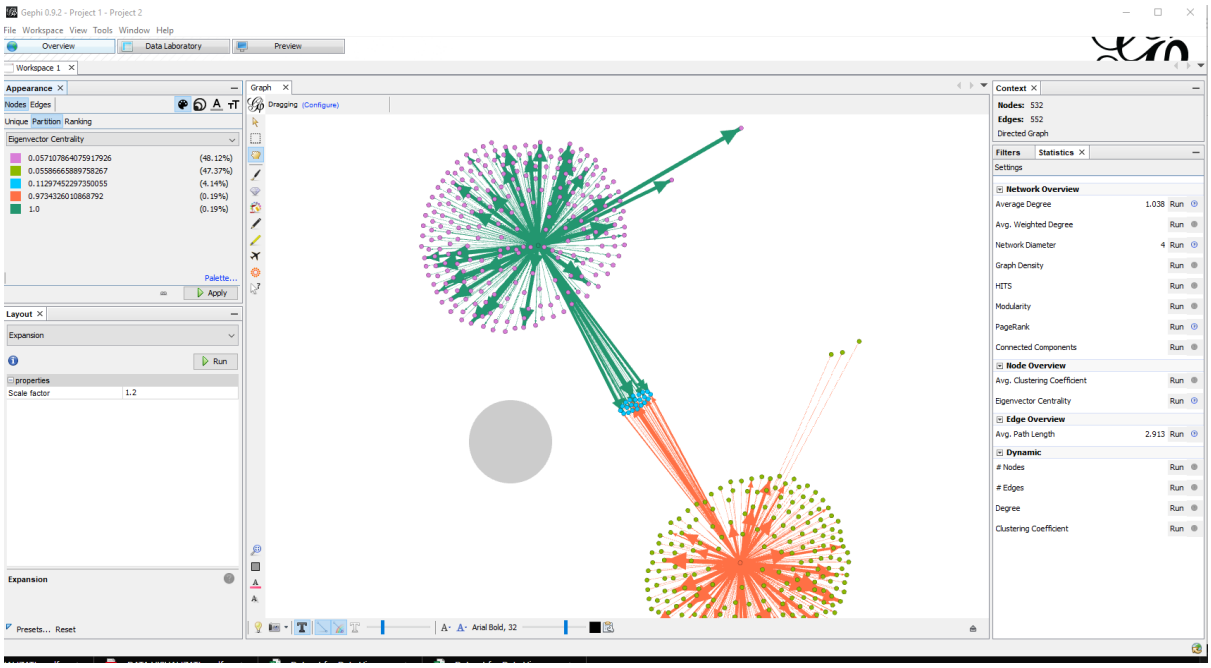
2

b. Please interpret the different groups. Which nodes are part of which group and why?

Node yang dibawah, dan lebih mendominan.

c. Calculate PageRank for your network, a special version of Eigenvector Centrality. Then answer the following questions: • How many groups of nodes do you get for PageRank? • What do they measure? • Is this useful?

Mengukur epsilon,probability untuk pagerank report dan mengukur number of interations,sum change untuk eugenvector centrality report. Ini sangat berguna

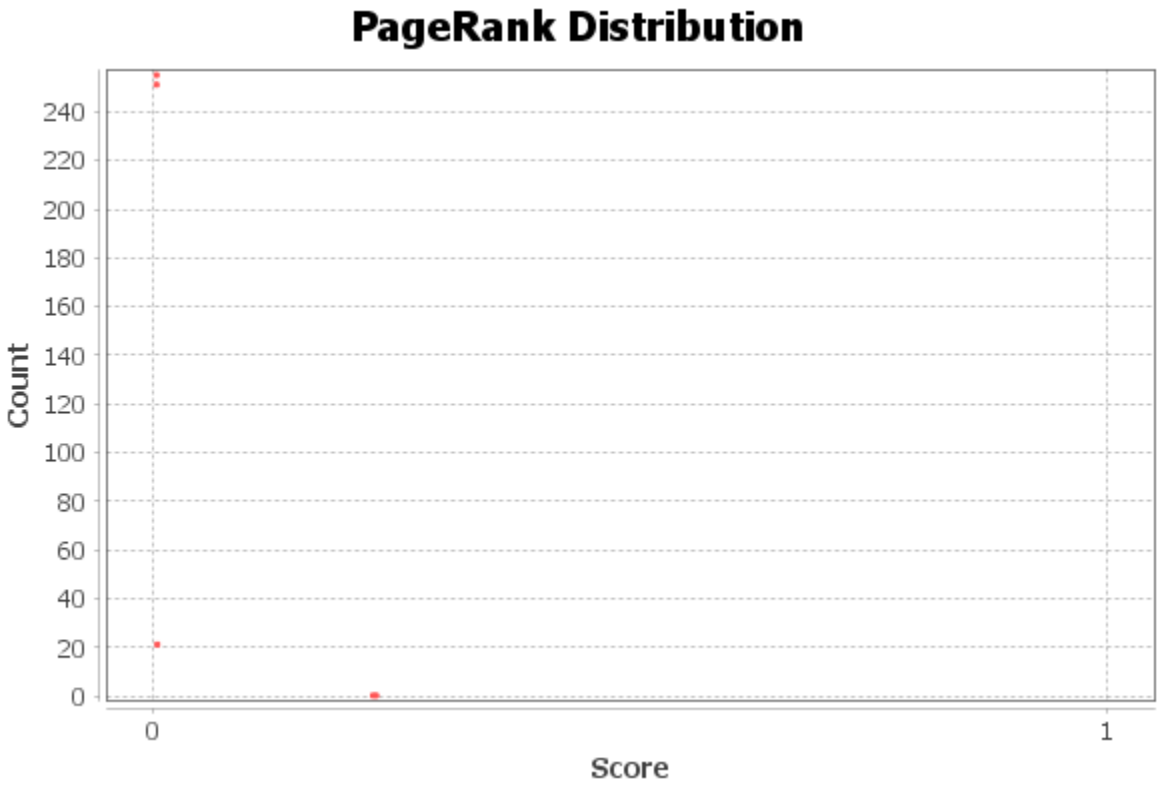


PageRank Report

Parameters:

Epsilon = 0.001
Probability = 0.85

Results:



Algorithm:

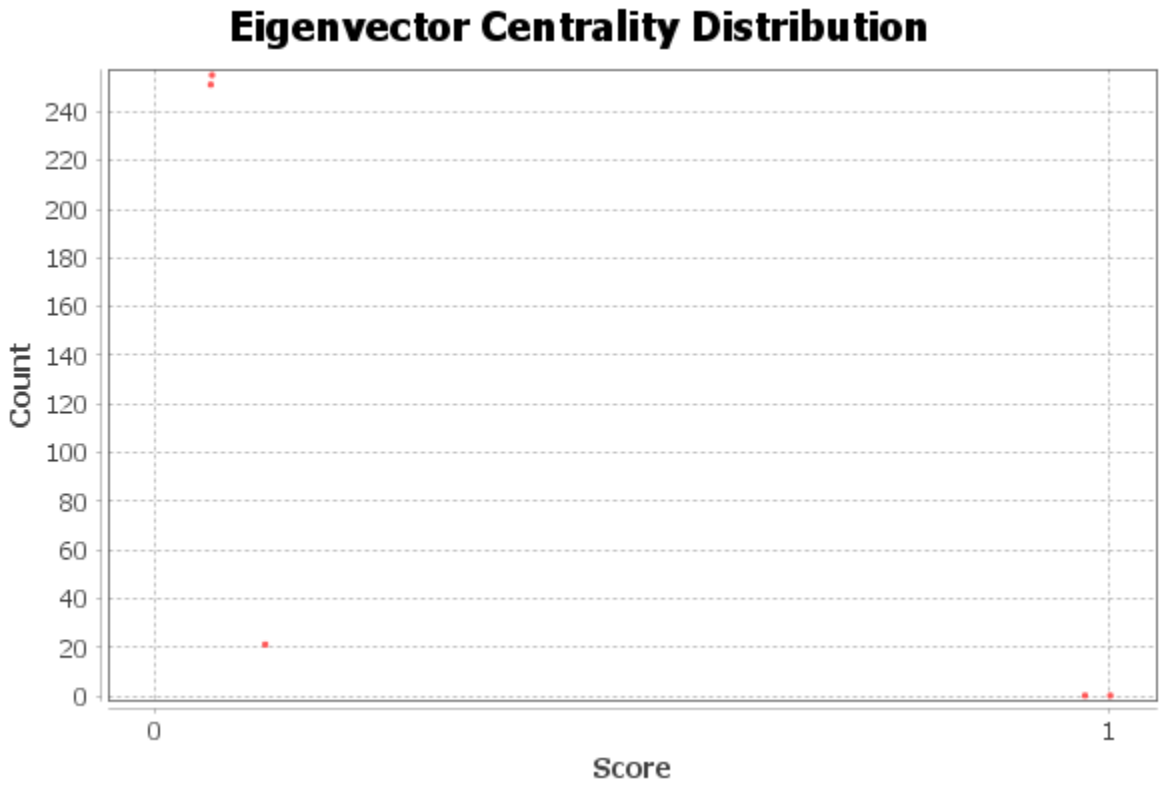
Sergey Brin, Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine*, in Proceedings of the seventh International Conference on the World Wide Web (WWW1998):107-117

Eigenvector Centrality Report

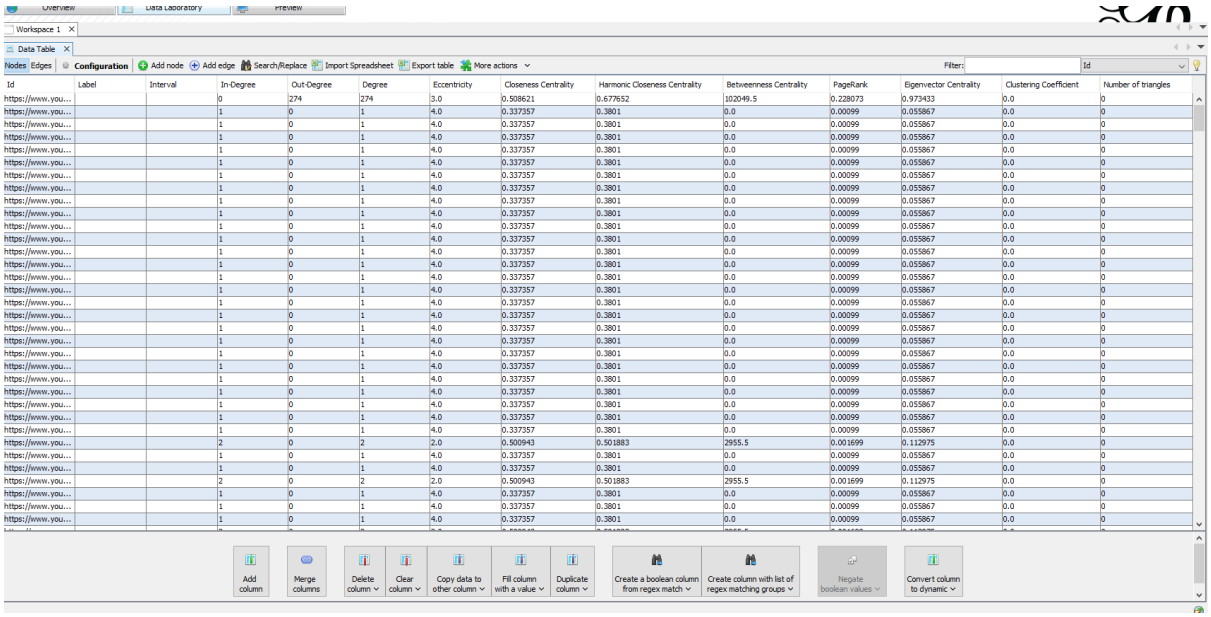
Parameters:

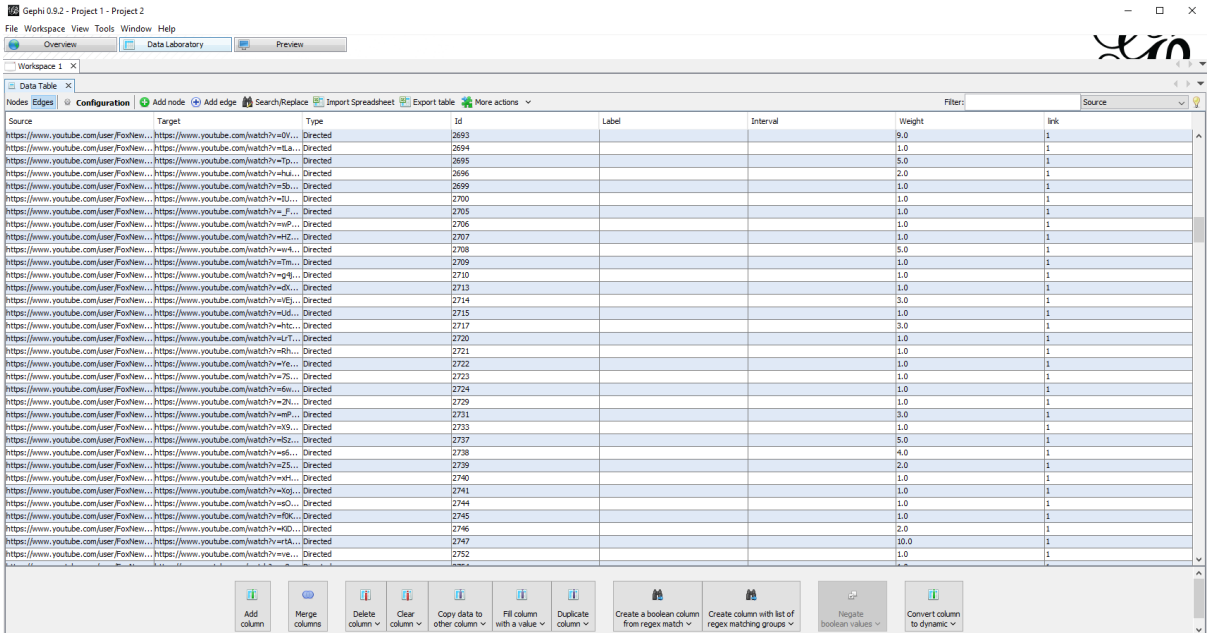
Network Interpretation: undirected
Number of iterations: 100
Sum change: 0.006660863822988833

Results:



Q6. Please upload a screenshot of your "Data Laboratory" tab, now at the end, after you have done the preceding analysis.




Gephi 0.9.2 - Project 1 - Project 2
File Workspace View Tools Window Help
Overview
Data Laboratory
Preview
Workspace 1
Data Table
Nodes Edges
Configuration
Add node
Add edge
Search/Replace
Import Spreadsheet
Export table
More actions
Filter:
Source
Source Target Type Id Label Interval Weight link
Add column
Merge columns
Delete column
Clear column
Copy data to other column
Fill column with a value
Duplicate column
Create a boolean column from regex match
Create column with list of regex matching groups
Negate boolean values
Convert column to dynamic