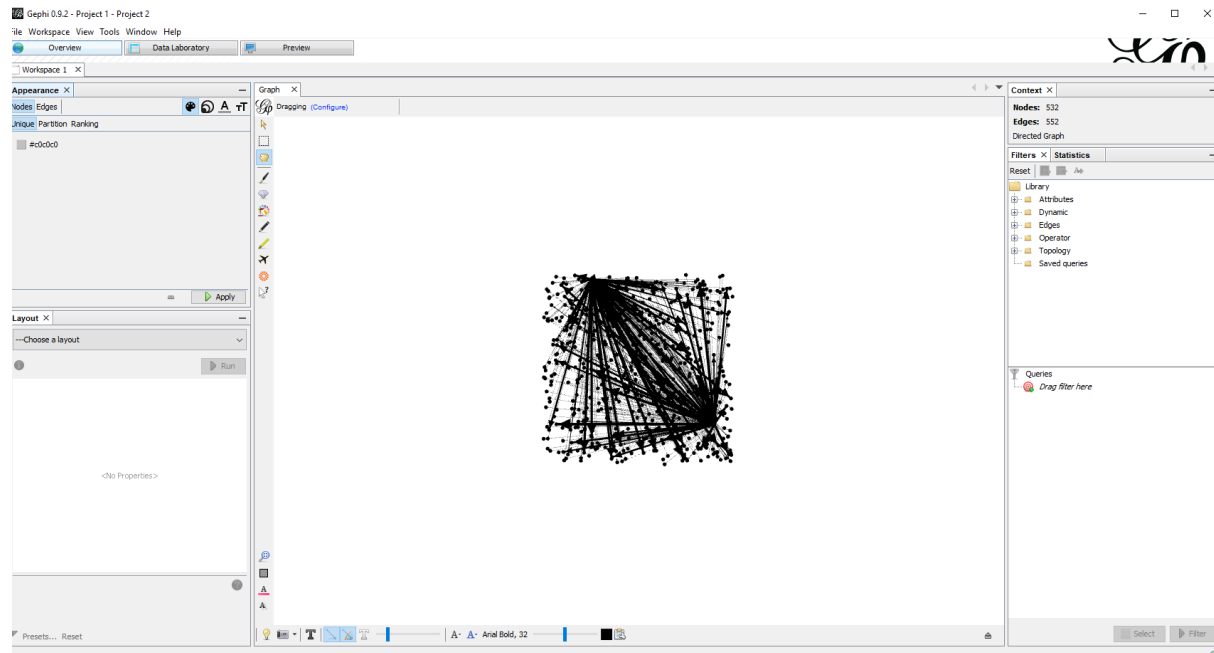


T.M.Fajar Pramudya

1301172735

Q1. Please upload the dataset in Gephi format.



The screenshot displays the Gephi 0.9.2 software interface with the 'Data Table' panel open. The table lists 30 rows of data, each representing a node. The columns are 'Id', 'Label', and 'Interval'. The 'Id' column contains YouTube video IDs, and the 'Label' column contains the corresponding YouTube URLs. The 'Interval' column is currently empty.

| Id | Label | Interval |
|--|-------|----------|
| https://www.youtube.com/user/FoxNewsChannel/videos | | |
| https://www.youtube.com/watch?v=8yqz7m5w3N8 | | |
| https://www.youtube.com/watch?v=mpu2m3CChA | | |
| https://www.youtube.com/watch?v=7K2H1L8_mWA | | |
| https://www.youtube.com/watch?v=7_O9Q8Gd.nc | | |
| https://www.youtube.com/watch?v=q2M45J5dE | | |
| https://www.youtube.com/watch?v=gcjG48FH4 | | |
| https://www.youtube.com/watch?v=JFdv2fa5pM | | |
| https://www.youtube.com/watch?v=dOOnu7Yv9oQ | | |
| https://www.youtube.com/watch?v=6Vn8mFyeeQ | | |
| https://www.youtube.com/watch?v=C38j9eC27kA | | |
| https://www.youtube.com/watch?v=spkAUjCP6y | | |
| https://www.youtube.com/watch?v=nlGd6-ent2Vik | | |
| https://www.youtube.com/watch?v=6x0FA9M5.c | | |
| https://www.youtube.com/watch?v=V9a3D3H4PKT | | |
| https://www.youtube.com/watch?v=spR0e3h3ue | | |
| https://www.youtube.com/watch?v=vvwv-43lnc | | |
| https://www.youtube.com/watch?v=4WVrhgF35-Q | | |
| https://www.youtube.com/watch?v=kOpnMoaWQg | | |
| https://www.youtube.com/watch?v=4qgPRQ8DA4 | | |
| https://www.youtube.com/watch?v=43p_5c14 | | |
| https://www.youtube.com/watch?v=JLMFgu46v8g | | |
| https://www.youtube.com/watch?v=46ymx0e7i | | |
| https://www.youtube.com/watch?v=483TJTck | | |
| https://www.youtube.com/watch?v=JLXAN4-8 | | |
| https://www.youtube.com/watch?v=8d8Yd53b0_E | | |
| https://www.youtube.com/watch?v=gpQoFh1m0 | | |
| https://www.youtube.com/watch?v=tm6AU4j5w | | |
| https://www.youtube.com/watch?v=504_LUrhwmM | | |
| https://www.youtube.com/watch?v=5PUA198H1M | | |
| https://www.youtube.com/watch?v=wp3Tef8F1 | | |
| https://www.youtube.com/watch?v=80NCOASu.g | | |
| https://www.youtube.com/watch?v=4qFuyJm6M | | |
| https://www.youtube.com/watch?v=7YncT2D4Hq | | |

Gephi 0.9.2 - Project 1 - Project 2

File Workspace View Tools Window Help

Overview Data Laboratory Preview

Workspace 1

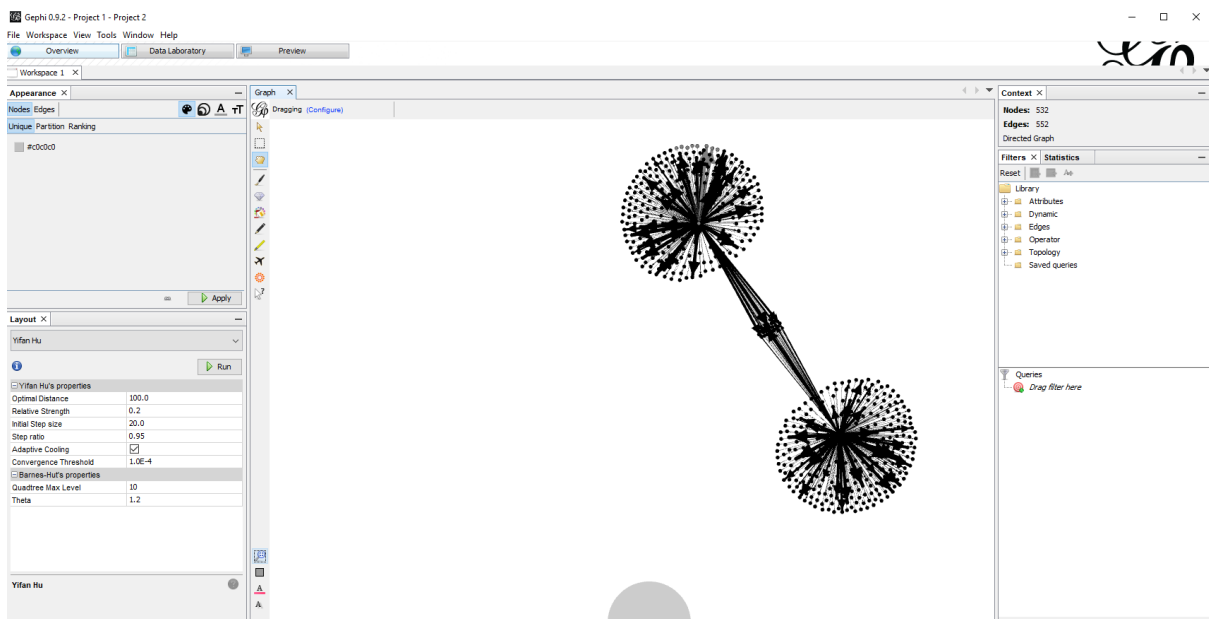
Data Table

Nodes Edges Configuration Add node Add edge Search/Replace Import Spreadsheet Export table More actions

| Source | Target | Type | Id | Label | Interval | Weight | Link |
|--|--|----------|------|-------|----------|--------|------|
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=8y... | Directed | 2096 | | | 16.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=rq... | Directed | 2097 | | | 14.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=X... | Directed | 2099 | | | 15.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=2... | Directed | 2100 | | | 16.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=q... | Directed | 2101 | | | 18.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=ng... | Directed | 2103 | | | 17.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=3... | Directed | 2104 | | | 16.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=0... | Directed | 2105 | | | 18.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6i... | Directed | 2106 | | | 24.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=23... | Directed | 2107 | | | 26.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=9A... | Directed | 2109 | | | 26.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=IG... | Directed | 2110 | | | 17.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=6X... | Directed | 2111 | | | 20.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=Va... | Directed | 2113 | | | 14.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=rgr... | Directed | 2115 | | | 26.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=nm... | Directed | 2117 | | | 26.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=a... | Directed | 2120 | | | 20.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6i... | Directed | 2124 | | | 29.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=lp... | Directed | 2128 | | | 29.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=43... | Directed | 2129 | | | 21.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r... | Directed | 2132 | | | 23.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=46... | Directed | 2135 | | | 22.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=48... | Directed | 2145 | | | 22.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=mu... | Directed | 2146 | | | 20.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=6E... | Directed | 2162 | | | 20.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=gd... | Directed | 2177 | | | 18.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=th... | Directed | 2181 | | | 20.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=50... | Directed | 2574 | | | 1.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=9P... | Directed | 2575 | | | 1.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r5b... | Directed | 2577 | | | 12.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6C... | Directed | 2578 | | | 2.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=4qx... | Directed | 2579 | | | 3.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=7y... | Directed | 2580 | | | 1.0 | 1 |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r8... | Directed | 2582 | | | 3.0 | 1 |

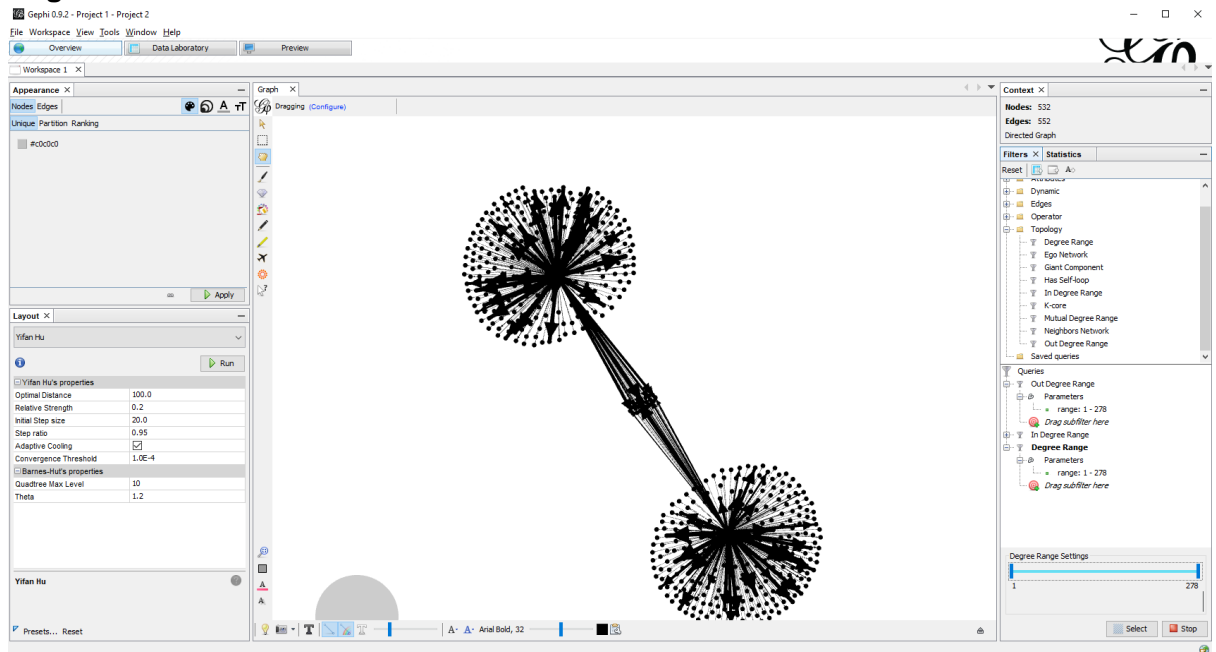
Add column Merge columns Delete column Clear column Copy data to other column Fill column with a value Duplicate column Create a boolean column from regex match Create column with list of regex matching groups Negate boolean values Convert column to dynamic

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

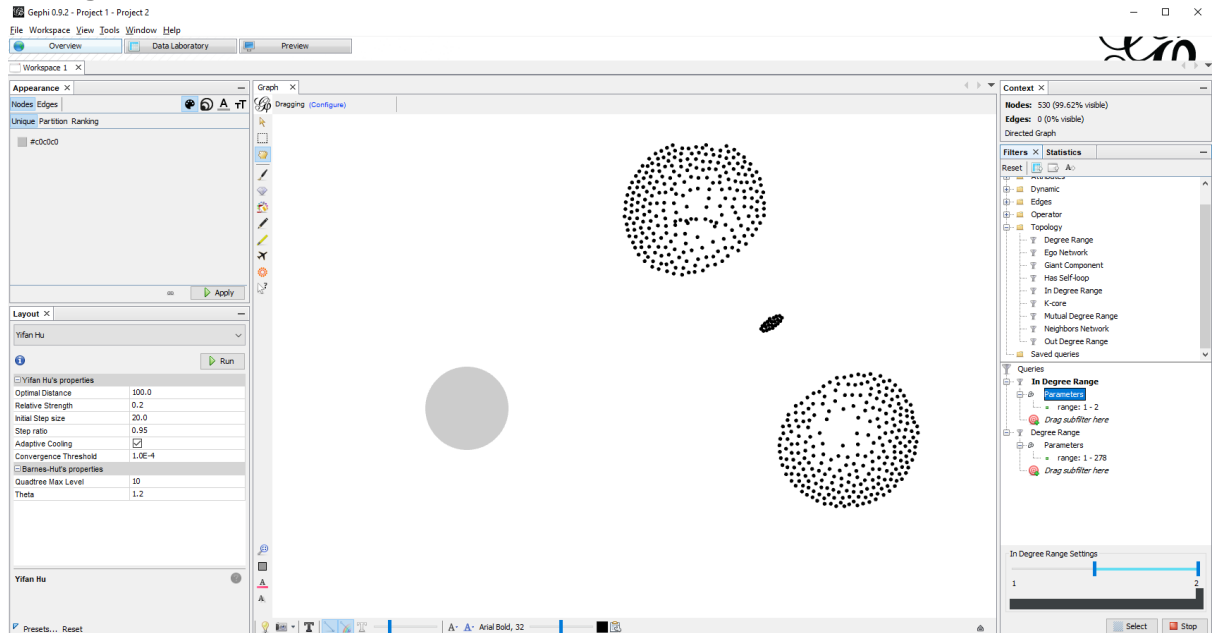


Q3. Calculate the average Degree of your network. Display and analyze all three resulting network measures:

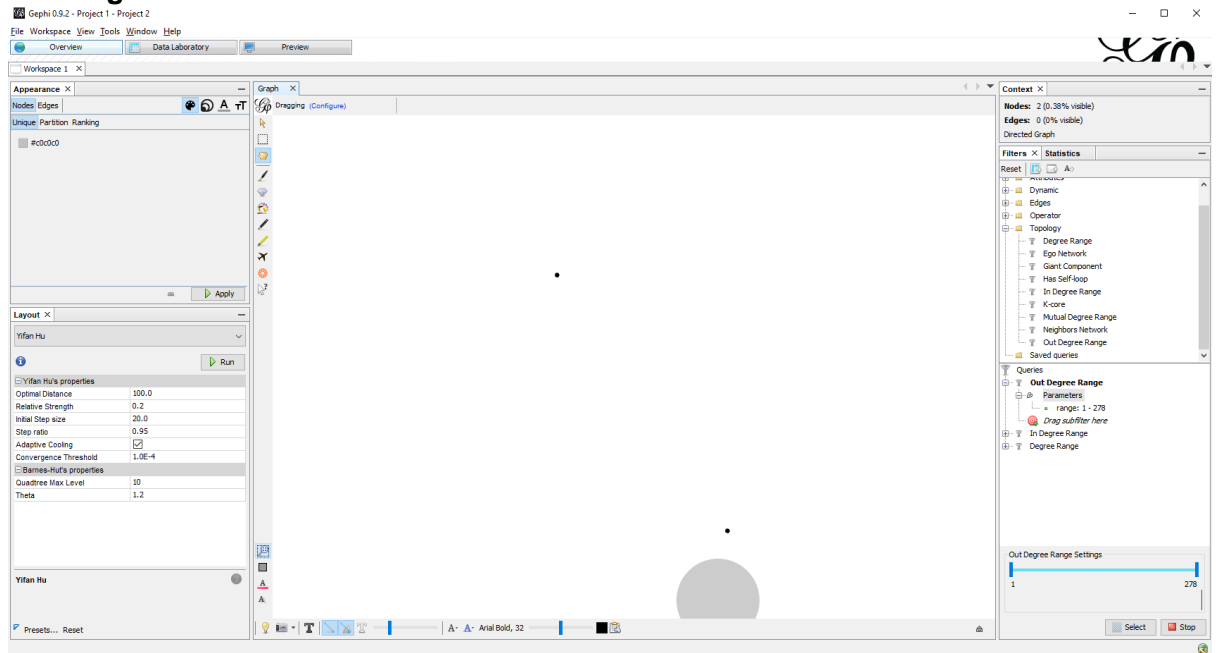
a. Degree



b. In-Degree



c. Out-Degree

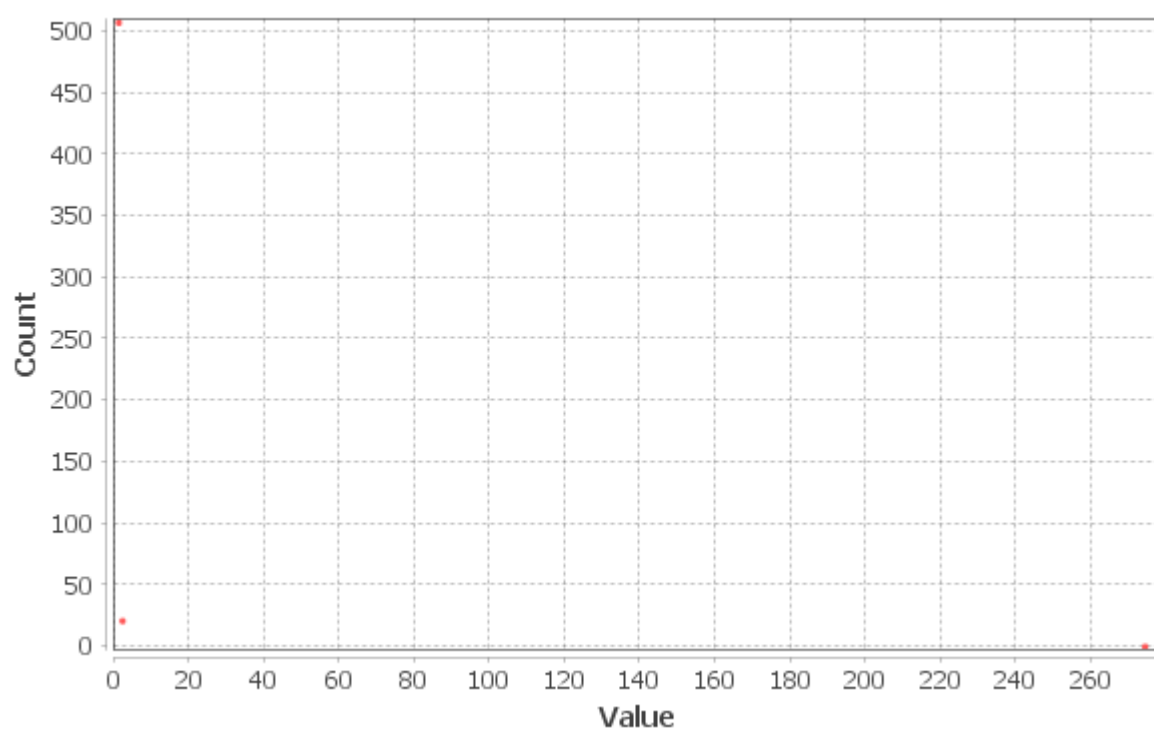


Degree Report

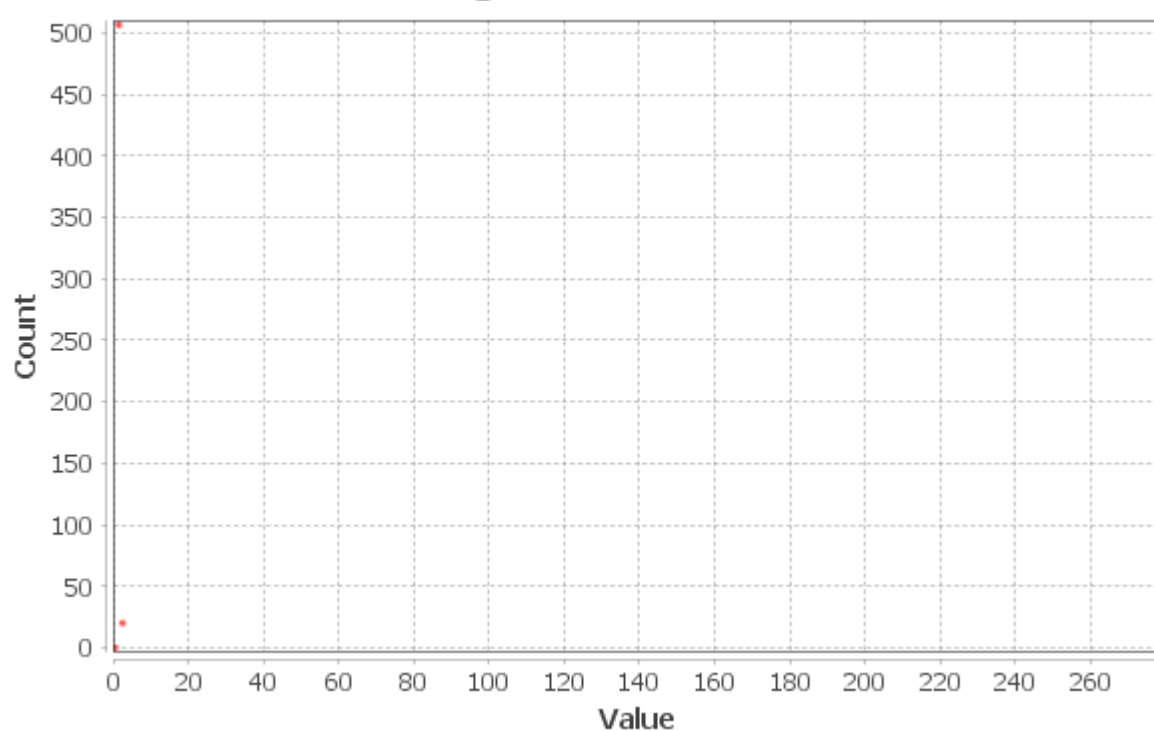
Results:

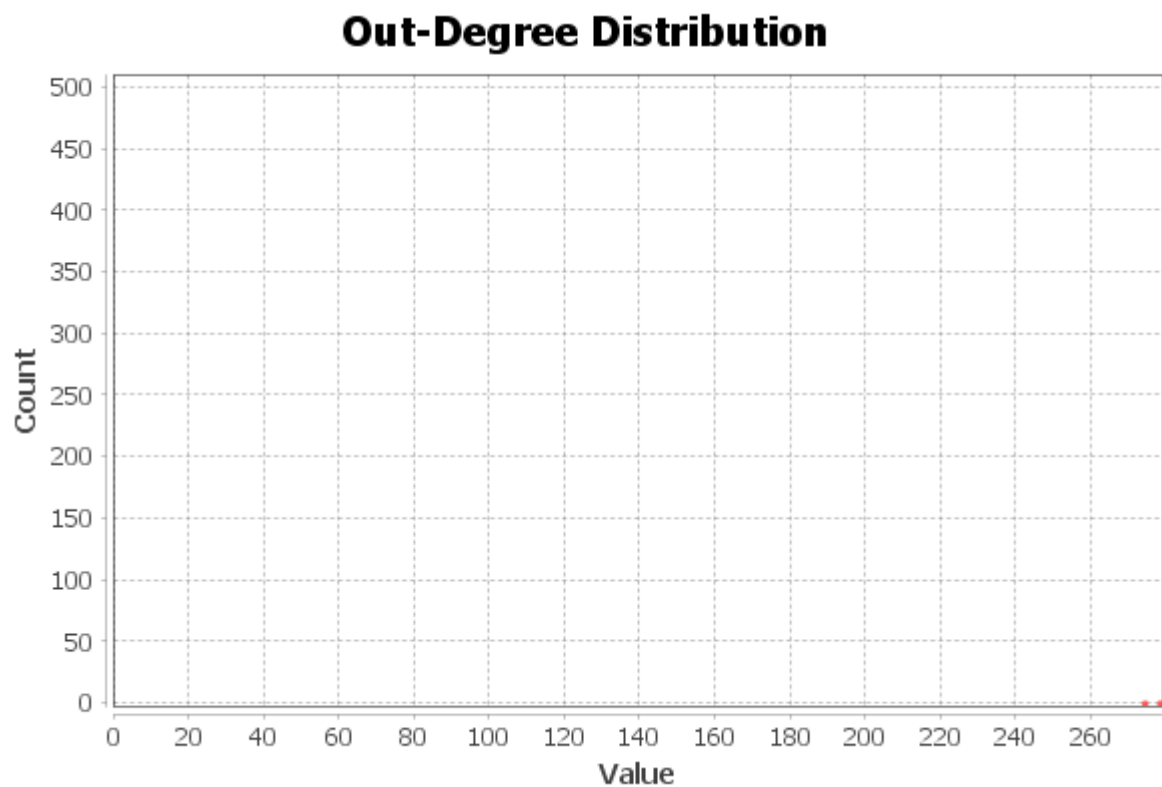
Average Degree: 1.038

Degree Distribution



In-Degree Distribution





Graph Distance Report

Parameters:

Network Interpretation: undirected

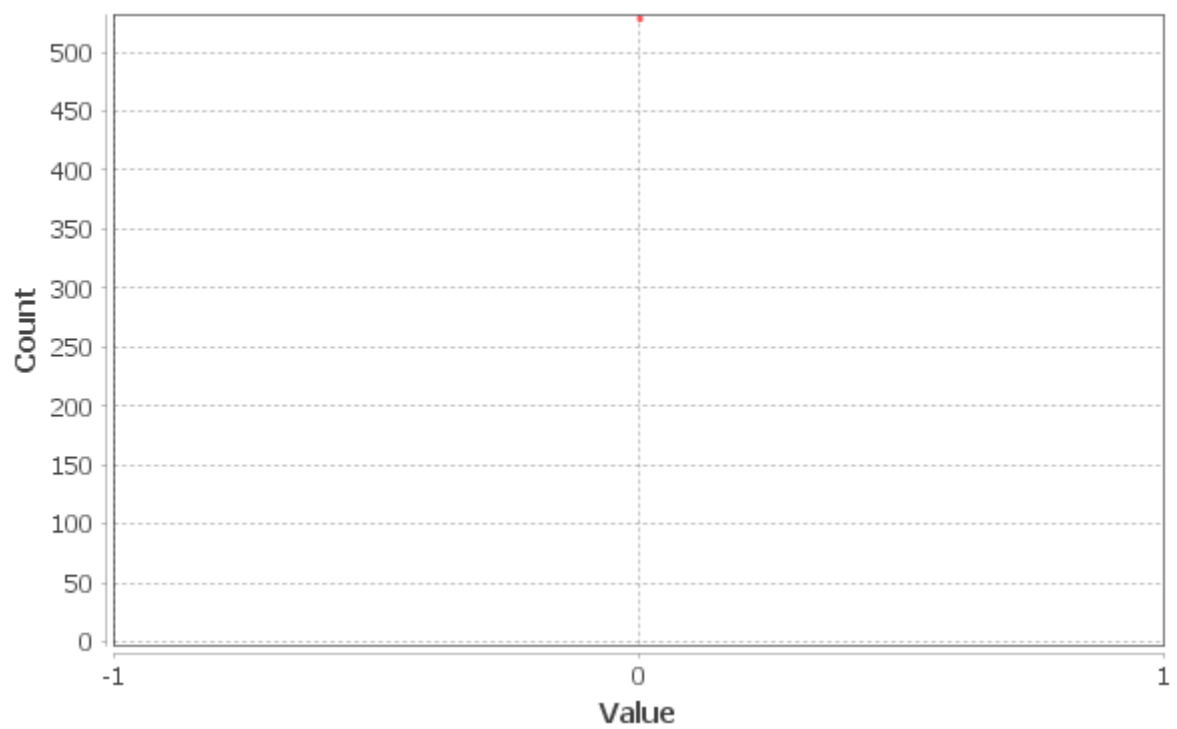
Results:

Diameter: 0

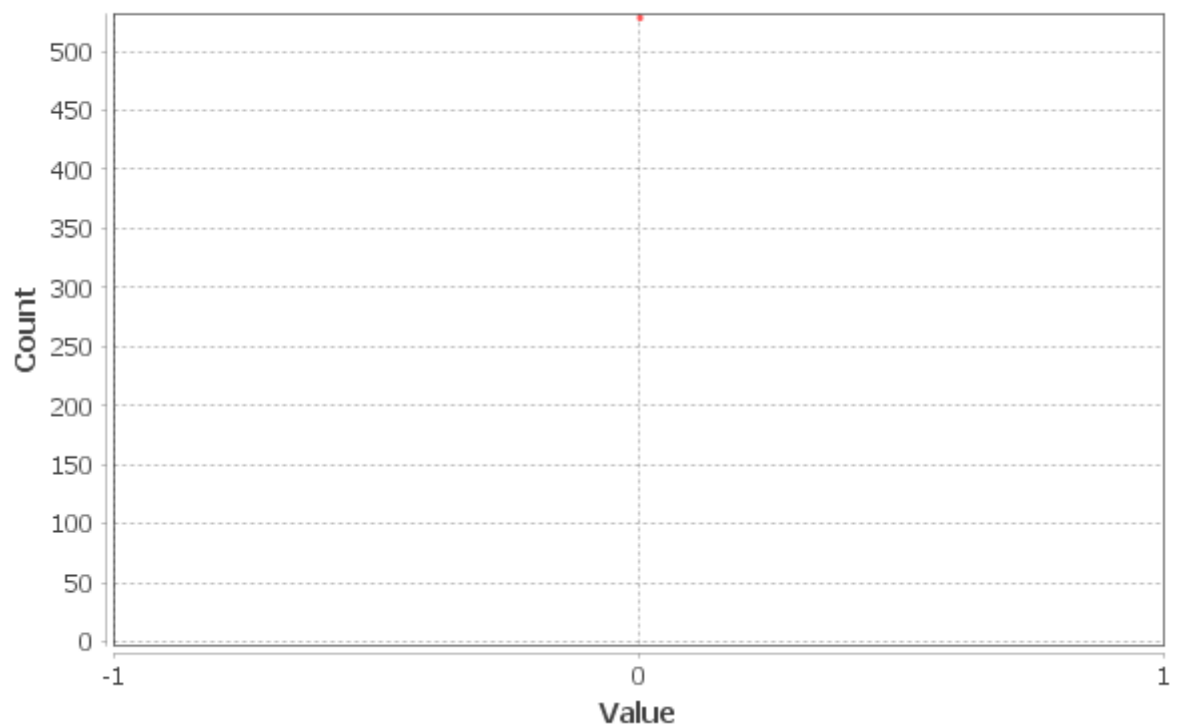
Radius: 0

Average Path length: NaN

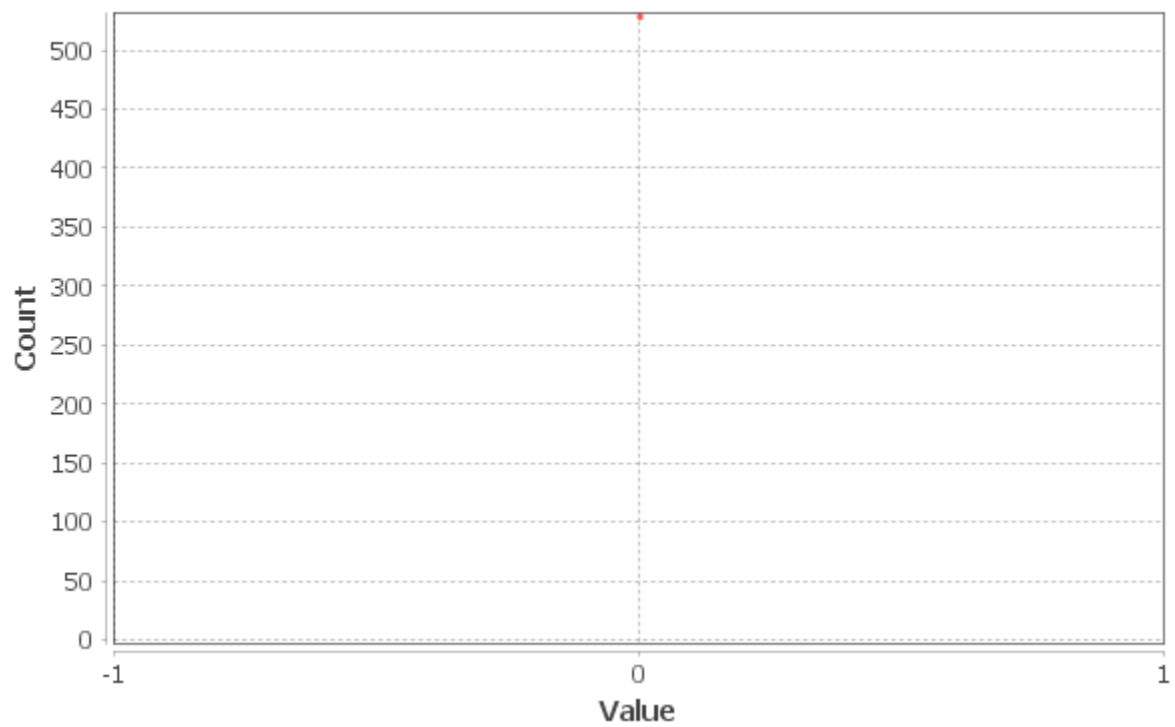
Betweenness Centrality Distribution



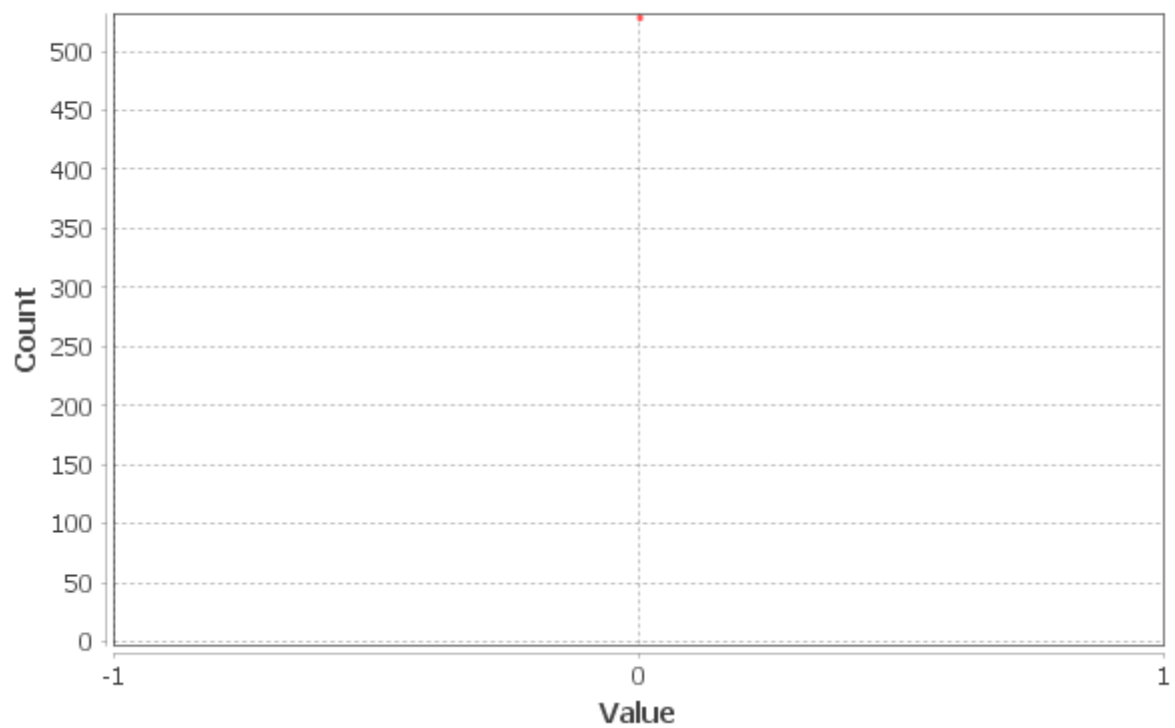
Closeness Centrality Distribution



Harmonic Closeness Centrality Distribution



Eccentricity Distribution



Algorithm:

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

Answer the following questions:

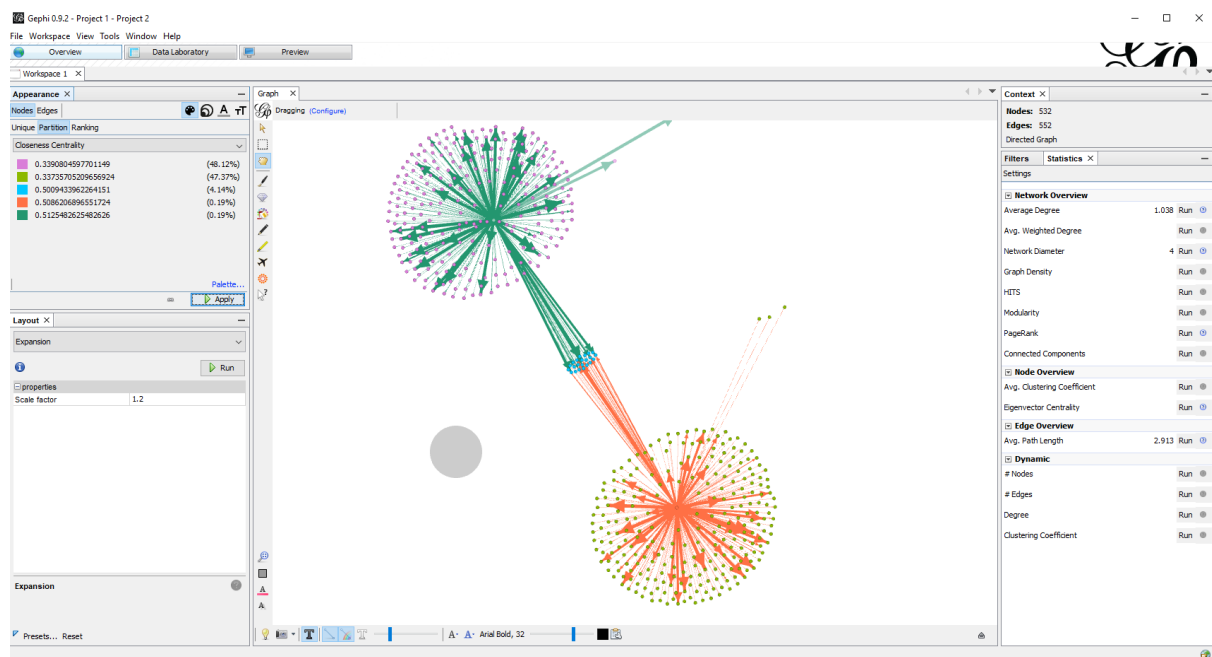
- What is the difference between them?
Pada in degree terdapat 530 nodes dan 0 edges, sedangkan pada out degree terdapat 2 nodes dan 0 edges.
- How many categories do you get for each?
4
- Can you make sense of the numbers the indicate the number of degree per category for each of the three measures? 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:



- How many groups of nodes do you get?

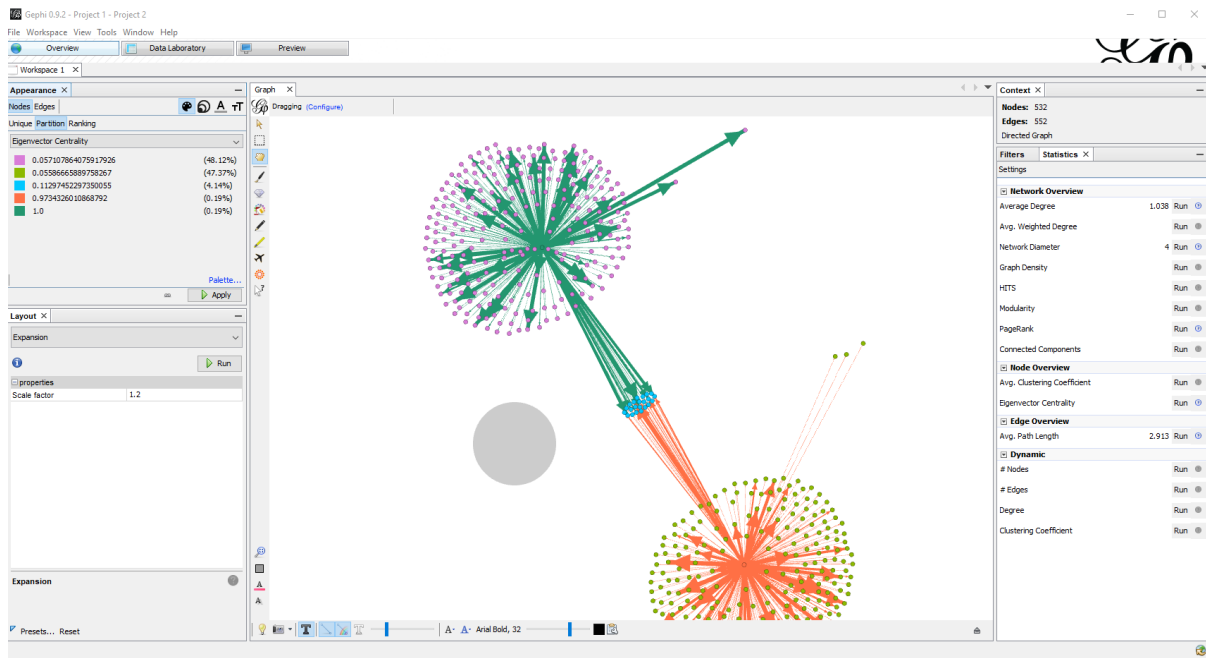
2

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

Node yang dibawah, dan lebih mendominasi.

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 iterations, sum change untuk eugenvector centrality report. Ini sangat berguna



PageRank Report

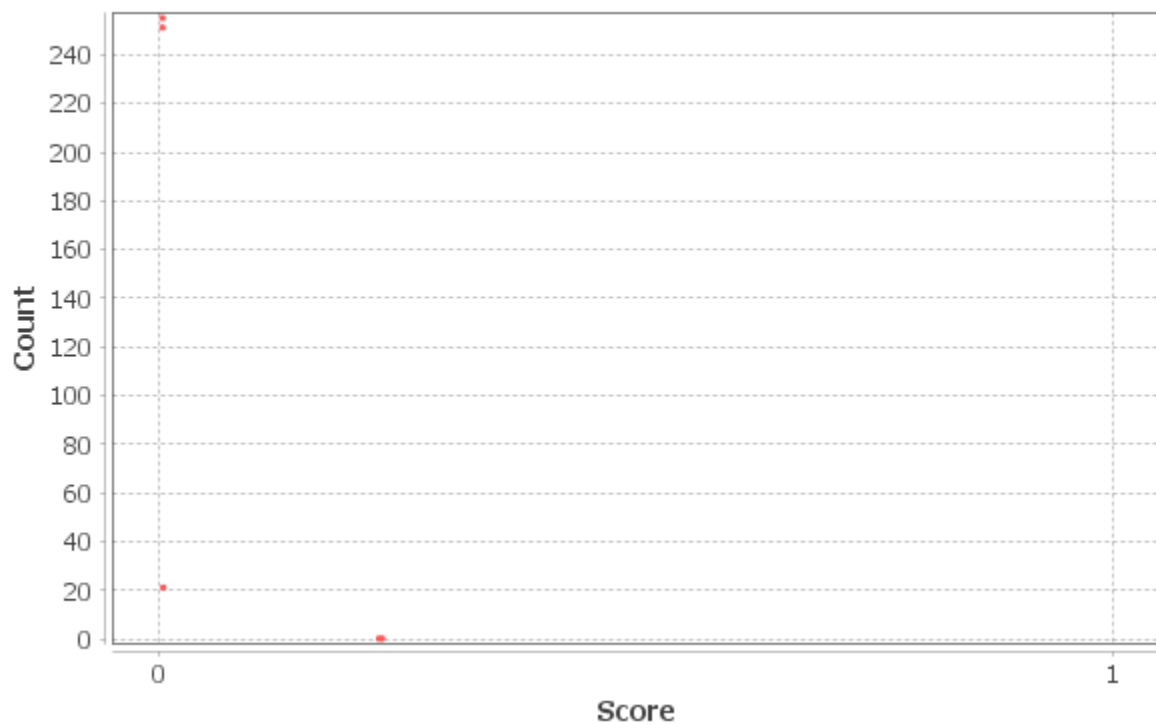
Parameters:

Epsilon = 0.001

Probability = 0.85

Results:

PageRank Distribution



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:

The scatter plot displays the frequency of scores. The x-axis, labeled 'Score', has major ticks at 0 and 1. The y-axis, labeled 'Count', has major ticks every 20 units from 0 to 240. The data points are as follows:

| Score | Count |
|-------|-------|
| 0.1 | 250 |
| 0.2 | 21 |
| 0.9 | 1 |
| 1.0 | 1 |

[illegible]

| 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 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=0Y... | Directed | 2693 | | | 9.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=wL... | Directed | 2694 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=7p... | Directed | 2695 | | | 5.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=4u... | Directed | 2696 | | | 2.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=3b... | Directed | 2699 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=U... | Directed | 2700 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=... | Directed | 2705 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=mP... | Directed | 2706 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=H2... | Directed | 2707 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=w4... | Directed | 2708 | | | 5.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=7m... | Directed | 2709 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=q8... | Directed | 2710 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=dK... | Directed | 2713 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=vEj... | Directed | 2714 | | | 3.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=Jd... | Directed | 2715 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=Ht... | Directed | 2717 | | | 3.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=U7... | Directed | 2720 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6... | Directed | 2721 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=re... | Directed | 2722 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=75... | Directed | 2723 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6m... | Directed | 2724 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=3r... | Directed | 2729 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=mP... | Directed | 2731 | | | 3.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=K9... | Directed | 2733 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=82... | Directed | 2737 | | | 5.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=wL... | Directed | 2738 | | | 4.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=2S... | Directed | 2739 | | | 2.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=w4... | Directed | 2740 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=Kq5... | Directed | 2741 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=s0... | Directed | 2744 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=r6... | Directed | 2745 | | | 1.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=K0... | Directed | 2746 | | | 2.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=rt6... | Directed | 2747 | | | 10.0 | 1 | | | |
| https://www.youtube.com/user/FoxNew... | https://www.youtube.com/watch?v=ie... | Directed | 2752 | | | 1.0 | 1 | | | |

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