**Page Rank**

Design Document -

The program consists of a single main function and a dfs function which computes rank of the pages present in the data and the size of the specific topic component in the entire data respectively.

After all the page ranks we select top 40 pages and then create a graph using networkx library.

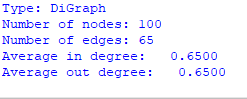
Formulas Used:

1. for calculating page rank and then the power iteration
2. { if , otherwise } for calculating topic specific page rank and then the power iteration

Data structures used:

List - List is used for storing the postings of the term

Results:



Python Packages Used:

* We have used python packages like **networkx and** **matplotlib.pyplot** to display the network of interconnected nodes. (Directional graph)

User defined functions:

* dfs(x):

This function will take the node as input and returns the list of interconnected nodes. (Depth First Traversal). This function will give the size of teleportation set that will be useful for calculating topic specific page rank.