Assignment 3 Part 2

Analyzing Social Networks using GraphX/GraphFrame

**Problem Statement**

**In this part, you will use Spark GraphX/GraphFrame to analyze social network data. You are free to choose any one of the social network datasets available from the SNAP repository.**

**You will use this dataset to construct a GraphX/GraphFrame graph and run some queries and algo- rithms on the graph.**

**Output of Queries**

1. Find the top 5 nodes with the highest outdegree and find the count of the number of outgoing edges in each.

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1. Calculate PageRank for each of the nodes and output the top 5 nodes with the highest PageRank values. You are free to define any suitable parameters.

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1. Run the connected components algorithm on it and find the top 5 components with the largest number of nodes.

*Connected Components: Strongly Connected Components:*

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1. Run the triangle counts algorithm on each of the vertices and output the top 5 vertices with the largest triangle count. In case of ties, you can randomly select the top 5 vertices.

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**Summary:**