

Homework - 6

Please upload the solutions to Blackboard. Please do NOT USE GIT.

CREATE

```
(alice:Person {name: 'Alice'}),
(bob:Person {name: 'Bob'}),
(carol:Person {name: 'Carol'}),
(dave:Person {name: 'Dave'}),
(eve:Person {name: 'Eve'}),
(guitar:Instrument {name: 'Guitar'}),
(synth:Instrument {name: 'Synthesizer'}),
(bongos:Instrument {name: 'Bongos'}),
(trumpet:Instrument {name: 'Trumpet'}),
(thriller:Book {name: 'Thriller'}),
(nonfiction:Book {name: 'NonFiction'}),
(historical:Book {name: 'Historical'}),
(literature:Book {name: 'Literature'}),
```

```
(alice)-[:LIKES]->(guitar),
(alice)-[:LIKES]->(synth),
(alice)-[:LIKES]->(bongos),
(bob)-[:LIKES]->(guitar),
(bob)-[:LIKES]->(synth),
(carol)-[:LIKES]->(bongos),
(dave)-[:LIKES]->(guitar),
(dave)-[:LIKES]->(synth),
(dave)-[:LIKES]->(bongos),
(alice)-[:READS]->(historical),
(alice)-[:READS]->(literature),
(bob)-[:READS]->(nonfiction),
(carol)-[:READS]->(thriller),
(carol)-[:READS]->(nonfiction),
(dave)-[:READS]->(thriller),
(dave)-[:READS]->(nonfiction);
```

Question: 1 (4 points)

Create this graph in the Neo4j blank sandbox.

Paste the query that can render the entire graph - that is all different types of nodes with all different types of relationships in the CREATE statement above. (Note - start with a blank sandbox or make sure all entities, relationships created earlier are deleted.)

Question: 2 (8 points)

Create a graph projection that only focuses on Instrument and Person and find out which 2 persons are most similar to each other.

Use <https://neo4j.com/docs/graph-data-science/current/algorithms/node-similarity/>

Please paste the CALL gds.graph.create command and the CALL gds.graph analytics algorithm

Question: 3 (8 points)

Create a graph projection that only focuses on Book and Person and find out which 2 persons are most similar to each other. Use

<https://neo4j.com/docs/graph-data-science/current/algorithms/node-similarity/>

Please paste the CALL gds.graph.create command and the CALL gds.graph analytics algorithm