Neo4j Lab

Be prepared to demonstrate your knowledge of all of the following concepts and operations.  Keep track of your scripts and any learning and notes in this document.

On the due date you will be required to demo your work and discuss what you have learned. You may use this document as reference during the pass off.

* Get Neo4j up and running on your machine. No clustering or sharding is required.
* You can download Neo4j to windows
* What are the Neo4j equivalents of an (if there are equivalents):
* RDBMS database:
* RDBMS table:
* RDBMS row:
* What is the case sensitivity of Neo4j?
* Import all 10,000 people records from Lab 1 into your Neo4j instance.
* Are you required to have any relationships between these new people records?
* What relationships might we want to record about these employee records (think about common business scenarios.)
* How are these relationships different from how we’d store them in a relational database or MongoDB?
* Demonstrate all four CRUD operations on a single record by key on the people collection in your Neo4j instance.
* Complete the following queries on your new data set:
* Return a single record by it’s key. (In SQL: …Where PrimaryKey = x)
* Return all the records with the same value for a field. (Where SomeField = x)
* Return all the records that participate in a particular relationship (i.e. Person is Married to Person)
* Is there a new4j way to….
* Return all the records \_having\_ a particular field. (Is there a SQL equivalent for this?)
* List the records missing a particular field.
* Return the count of the records that have fields with a particular value. (Count(\*) …. Where Field = ‘test’)
* Does neo4j have support for robust indexes? If so, ho would you create an index on the people records you imported.
* Summarize the steps to create a cluster in neo4j. You don’t need to carry out the steps unless you want to… just be able to describe what would be required for setting up a cluster and scaling it up or down horizontally.
* Compare and contrast the strengths and weaknesses of Neo4j vs
* Relational Databases
* MongoDB
* Serialized Files
* HashMap/HashTable
* Be prepared to discuss three examples of software systems for which Neo4j would be a wise database choice.
* Be prepared to discuss examples of software systems for which Neo4j would be a poor database choice.