Atividade Prática – Neo4j

Em sua conta github, adicione uma pasta com nome neo4j. Ali, você deve colocar um README.md detalhando as respostas para cada atividade desta prática. Concentre-se mais em garantir que está absorvendo o conteúdo, lendo as APIs do banco e tentando fazer as queries e operações da forma correta.

Nas respostas (README.md), mantenha parte do conteúdo desse material para facilitar a localização e as respostas coletadas. Para o Neo4j, algumas vezes as imagens podem ser mais simples de enviar como parte da resposta. Concentre-se no código e quando necessário, envie as imagens seguindo a especificação do markdown. Mas evite fazer imagem para cada resposta pois são muitas atividades, o código será suficiente.

Exercício 1- Retrieving Nodes

Coloque os comandos utilizado em cada item a seguir:

- Exercise 1.1: Retrieve all nodes from the database.
- Exercise 1.2: Examine the data model for the graph.
- Exercise 1.3: Retrieve all Person nodes.
- Exercise 1.4: Retrieve all Movie nodes.

Exercício 2 – Filtering queries using property values

Coloque os comandos utilizado em cada item a seguir:

- Exercise 2.1: Retrieve all movies that were released in a specific year.
- Exercise 2.2: View the retrieved results as a table.
- Exercise 2.3: Query the database for all property keys.
- Exercise 2.4: Retrieve all Movies released in a specific year, returning their titles.
- Exercise 2.5: Display title, released, and tagline values for every Movie node in the graph.
- Exercise 2.6: Display more user-friendly headers in the table

Exercício 3 - Filtering queries using relationships

Coloque os comandos utilizado em cada item a seguir:

- Exercise 3.1: Display the schema of the database.
- Exercise 3.2: Retrieve all people who wrote the movie Speed Racer.
- Exercise 3.3: Retrieve all movies that are connected to the person, Tom Hanks.
- Exercise 3.4: Retrieve information about the relationships Tom Hanks had with the set of movies retrieved earlier.
- Exercise 3.5: Retrieve information about the roles that Tom Hanks acted in.

Exercício 4 – Filtering queries using WHERE clause

Coloque os comandos utilizado em cada item a seguir:

- Exercise 4.1: Retrieve all movies that Tom Cruise acted in.
- Exercise 4.2: Retrieve all people that were born in the 70's.
- Exercise 4.3: Retrieve the actors who acted in the movie The Matrix who were born after 1960.
- Exercise 4.4: Retrieve all movies by testing the node label and a property.
- Exercise 4.5: Retrieve all people that wrote movies by testing the relationship between two nodes.
- Exercise 4.6: Retrieve all people in the graph that do not have a property.

- Exercise 4.7: Retrieve all people related to movies where the relationship has a property.
- Exercise 4.8: Retrieve all actors whose name begins with James.
- Exercise 4.9: Retrieve all all REVIEW relationships from the graph with filtered results.
- Exercise 4.10: Retrieve all people who have produced a movie, but have not directed a movie.
- Exercise 4.11: Retrieve the movies and their actors where one of the actors also directed the movie.
- Exercise 4.12: Retrieve all movies that were released in a set of years.
- Exercise 4.13: Retrieve the movies that have an actor's role that is the name of the movie.

Exercício 5 – Controlling query processing

Coloque os comandos utilizado em cada item a seguir:

- Exercise 5.1: Retrieve data using multiple MATCH patterns.
- Exercise 5.2: Retrieve particular nodes that have a relationship.
- Exercise 5.3: Modify the query to retrieve nodes that are exactly three hops away.
- Exercise 5.4: Modify the query to retrieve nodes that are one and two hops away.
- Exercise 5.5: Modify the query to retrieve particular nodes that are connected no matter how many hops are required.
- Exercise 5.6: Specify optional data to be retrieved during the query.
- Exercise 5.7: Retrieve nodes by collecting a list.
- Exercise 5.9: Retrieve nodes as lists and return data associated with the corresponding lists.
- Exercise 5.10: Retrieve nodes and their relationships as lists.
- Exercise 5.11: Retrieve the actors who have acted in exactly five movies.
- Exercise 5.12: Retrieve the movies that have at least 2 directors with other optional data.

Exercício 6 – Controlling results returned

Coloque os comandos utilizado em cada item a seguir:

- Exercise 6.1: Execute a query that returns duplicate records.
- Exercise 6.2: Modify the query to eliminate duplication.
- Exercise 6.3: Modify the query to eliminate more duplication.
- Exercise 6.4: Sort results returned.
- Exercise 6.5: Retrieve the top 5 ratings and their associated movies.

- Exercise 6.6: Retrieve all actors that have not appeared in more than 3 movies.

Exercício 7 – Working with cypher data

Coloque os comandos utilizado em cada item a seguir:

- Exercise 7.1: Collect and use lists.
- Exercise 7.2: Collect a list.
- Exercise 7.3: Unwind a list.
- Exercise 7.4: Perform a calculation with the date type.

Exercício 8 – Creating nodes

Coloque os comandos utilizado em cada item a seguir:

- Exercise 8.1: Create a Movie node.
- Exercise 8.2: Retrieve the newly-created node.
- Exercise 8.3: Create a Person node.
- Exercise 8.4: Retrieve the newly-created node.
- Exercise 8.5: Add a label to a node.
- Exercise 8.6: Retrieve the node using the new label.
- Exercise 8.7: Add the Female label to selected nodes.
- Exercise 8.8: Retrieve all Female nodes.
- Exercise 8.9: Remove the Female label from the nodes that have this label.
- Exercise 8.10: View the current schema of the graph.
- Exercise 8.11: Add properties to a movie.
- Exercise 8.12: Retrieve an OlderMovie node to confirm the label and properties.
- Exercise 8.13: Add properties to the person, Robin Wright.
- Exercise 8.14: Retrieve an updated Person node.
- Exercise 8.15: Remove a property from a Movie node.
- Exercise 8.16: Retrieve the node to confirm that the property has been removed.
- Exercise 8.17: Remove a property from a Person node.
- Exercise 8.18: Retrieve the node to confirm that the property has been removed.

Exercício 9 – Creating relationships

Coloque os comandos utilizado em cada item a seguir:

- Exercise 9.1: Create ACTED_IN relationships.
- Exercise 9.2: Create DIRECTED relationships.

- Exercise 9.3: Create a HELPED relationship.
- Exercise 9.4: Query nodes and new relationships.
- Exercise 9.5: Add properties to relationships.
- Exercise 9.6: Add a property to the HELPED relationship.
- Exercise 9.7: View the current list of property keys in the graph.
- Exercise 9.8: View the current schema of the graph.
- Exercise 9.9: Retrieve the names and roles for actors.
- Exercise 9.10: Retrieve information about any specific relationships.
- Exercise 9.11: Modify a property of a relationship.
- Exercise 9.12: Remove a property from a relationship.
- Exercise 9.13: Confirm that your modifications were made to the graph.

Exercício 10 – Deleting nodes and relationships

Coloque os comandos utilizado em cada item a seguir:

- Exercise 10.1: Delete a relationship.
- Exercise 10.2: Confirm that the relationship has been deleted.
- Exercise 10.3: Retrieve a movie and all of its relationships.
- Exercise 10.4: Try deleting a node without detaching its relationships.
- Exercise 10.5: Delete a Movie node, along with its relationships.
- Exercise 10.6: Confirm that the Movie node has been deleted.