ISTE-438 Contemporary Databases

Practice Exercise – Neo4j Loading Data / Functions

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Given the earnings database that was created in class, there were two labels (Earnings and Customer) and a relationship (:EARNINGS\_OF). Do the following queries using functions:

1. Count the Earnings records.
2. Count the Customer records.
3. Count the earnings records by customer name.
4. How many EARNINGS\_OF relationships are there?
5. How many unique customer names are represented by the earnings records? (DISTINCT?)
6. On what report dates did each customer have its maximum sales? (you will need WITH here)
7. What are the total earnings for 2010? (you will need SPLIT here)

Paste queries and results into an MS Word Document file and submit to the MyCourses dropbox.

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Have your instructor or TA sign here when PE is completed.**

1.) MATCH (c:Earnings) RETURN count(c)

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│"count(c)"│

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│99 │

└──────────┘

2.) MATCH (c:Customer) RETURN count(c)

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│"count(c)"│

╞══════════╡

│31 │

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3.) MATCH (c:Customer)-[r]->(e:Earnings) RETURN count(e)

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│"count(e)"│

╞══════════╡

│99 │

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4.) MATCH (c:Customer)-[r:EARNINGS\_OF]->(e:Earnings) RETURN count(r)

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│"count(r)"│

╞══════════╡

│99 │

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5.) MATCH (c:Earnings) RETURN distinct count(c.customerID)

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│"count(c.customerID)"│

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│99 │

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6.) MATCH (n2:Customer)

with n2.custID as cust

MATCH (e:Earnings)

WHERE e.customerID = cust

RETURN e.reportDate,Max(e.earnings)

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│"e.reportDate"│"Max(e.earnings)"│

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│"10/13/2010" │383.0 │

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│"2/28/2010" │550.0 │

├──────────────┼─────────────────┤

│"3/3/2010" │399.0 │

├──────────────┼─────────────────┤

│"9/1/2010" │345.0 │

├──────────────┼─────────────────┤

│"4/1/2010" │372.0 │

├──────────────┼─────────────────┤

│"8/1/2010" │338.0 │

├──────────────┼─────────────────┤

│"6/10/2010" │337.0 │

7.

MATCH (e:Earnings)

where right(e.reportDate,4)='2010'

RETURN sum(e.earnings) as Earning\_2010

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│"Earning\_2010"│

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│22292.0 │

└──────────────┘