PE 05 Neo4j

Output

Part 1)

LOAD CSV WITH HEADERS FROM 'file:///District.csv' as line

CREATE (:District {distID: line.distID, distName: line.distName, regionID: line.regionID})

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LOAD CSV WITH HEADERS FROM 'file:///Region.csv' as line

CREATE (:Region {regionID: line.regionID, regionName: line.regionName})

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MATCH (n:Region)

MATCH (m:District

WHERE n.regionID = m.regionID

CREATE (m)-[:CONTAINS\_DISTRICT]->(n)

MATCH (n:Customer)

MATCH (m:District)

WHERE n.districtID = m.distID

CREATE (n)-[:CONTAINS\_CUSTOMER]->(m)

Part 2)

1)

MATCH (r:Region{regionName:"Eastern"})-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)

RETURN r.regionName AS Region\_Name, COUNT(c.name) AS Customers

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2)

MATCH (r:Region{regionName:"Eastern"})-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)-[:EARNINGS\_OF]-(e:Earnings)

RETURN sum(e.earnings) AS Total\_Earnings, r.regionName AS Region

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3)

MATCH (r:Region{regionName:"Eastern"})-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)-[:EARNINGS\_OF]-(e:Earnings)

RETURN c.name AS Customers, AVG(e.earnings) AS Average\_Earnings, r.regionName AS Region

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4)

MATCH (r:Region)-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)-[:EARNINGS\_OF]-(e:Earnings)

WHERE r.regionName IN ['Eastern', 'Western']

RETURN r.regionName AS Region, SUM(e.earnings) AS Total

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5)

MATCH (r:Region)-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)-[:EARNINGS\_OF]-(e:Earnings)

WITH r,e,c,n,SPLIT(e.reportDate,'/')[2] = '2010' AS Year

WHERE c.name STARTS WITH 'S' AND Year

RETURN r.regionName AS Region\_Name, n.distName AS District\_Name, c.name AS Customers, sum(e.earnings) AS Total\_Earnings

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6)

MATCH (r:Region)-[:CONTAINS\_DISTRICT]-(n:District)-[:CONTAINS\_CUSTOMER]-(c:Customer)-[:EARNINGS\_OF]-(e:Earnings)

WITH r,e,c,n,SPLIT(e.reportDate,'/')[0] as DATE,SPLIT(e.reportDate,'/')[1] as MONTH,SPLIT(e.reportDate,'/')[2] as YEAR

SET e.month = MONTH, e.date = DATE, e.year = YEAR

RETURN e.earnings, e.year, e.date, e.month