# CMPINF 2110

Spring 2022

Week 12

Queries in lecture not in the other presentations

# Orders sold by EmployeeID 1
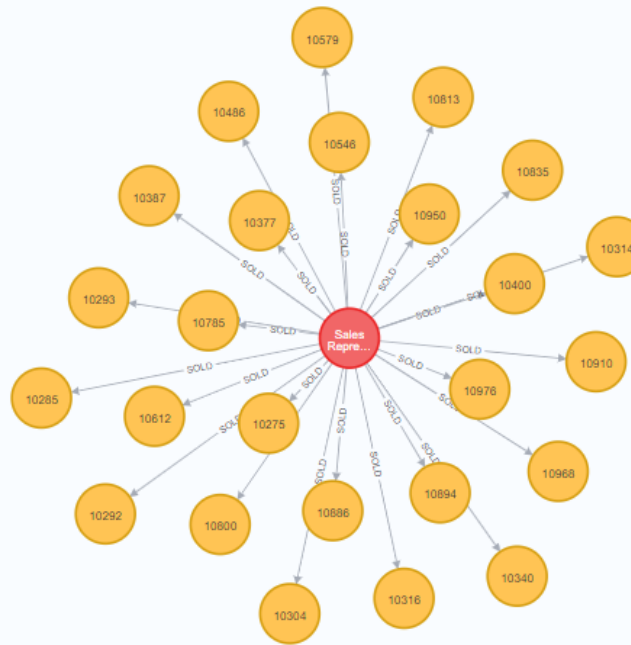
# Products contained in Orders sold by EmployeeID 1

```
1  //find all products sold in orders by 1 employee
2  MATCH (e:Employee)--(o:Order)--(p:Product)
3  WHERE e.employeeID = '1'
4  RETURN e, o, p LIMIT 50;
```



**Overview**

**Node labels**

* (55)    Employee (1)    Order (21)    Product (33)

**Relationship Types**

* (72)    SOLD (21)    CONTAINS (51)

Displaying 55 nodes, 0 relationships.
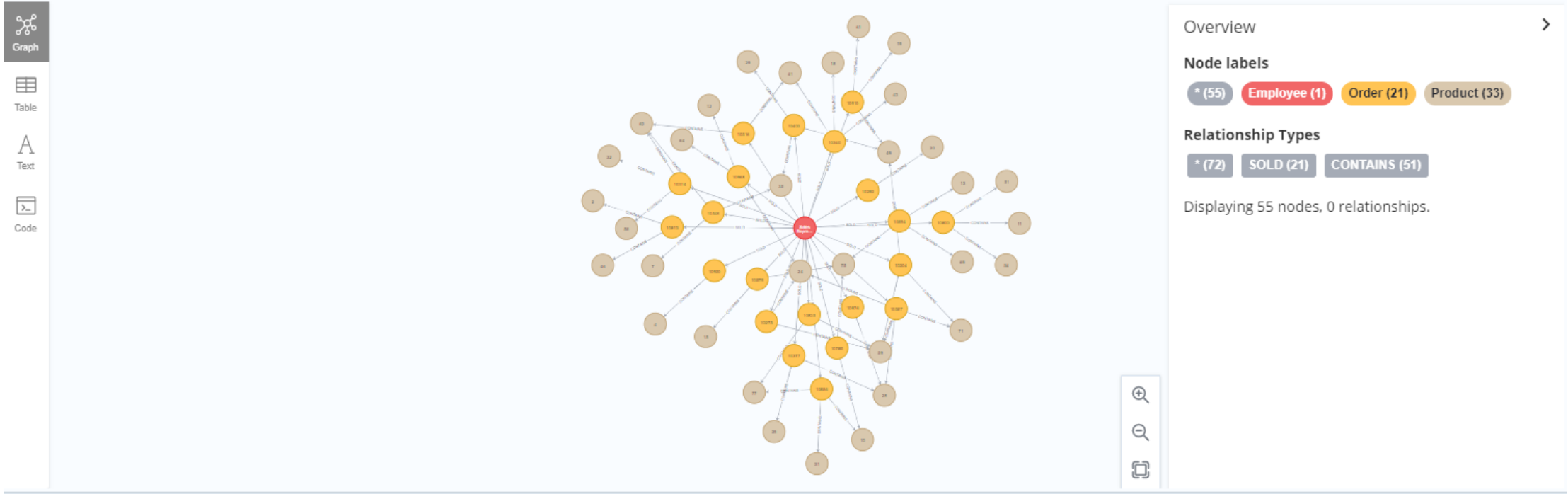
# How many orders did each employee sell?



```
1  //how man orders did each employee sell?
2  MATCH (o:Order)--(e:Employee)
3  RETURN e.employeeID, count(DISTINCT o.orderID);
```

| e.employeeID | count(DISTINCT o.orderID) |
|---|---|
| "4" | 156 |
| "5" | 42 |
| "6" | 67 |
| "7" | 72 |
| "8" | 104 |
| "9" | 43 |

Started streaming 9 records after 4 ms and completed after 6 ms.

# Which employee sold the most orders?

```
1  //how man orders did each employee sell?
2  MATCH (o:Order)--(e:Employee)
3  RETURN e.employeeID, e.title, count(DISTINCT o.orderID) AS total_orders
4  ORDER BY total_orders DESC;
```

| e.employeeID | e.title | total_orders |
|---|---|---|
| "4" | "Sales Representative" | 156 |
| "3" | "Sales Representative" | 127 |
| "1" | "Sales Representative" | 123 |
| "8" | "Inside Sales Coordinator" | 104 |
| "2" | "Vice President, Sales" | 96 |
| "7" | "Sales Representative" | 72 |

Started streaming 9 records after 11 ms and completed after 15 ms.

# Total price of each product contained in an order sold by an employee

```
1  MATCH (e:Employee)--(o:Order)-[r:CONTAINS]-(p:Product)
2  RETURN e.employeeID, o.orderID, p.productID, sum(r.quantity * r.unitPrice);
```

| e.employeeID | o.orderID | p.productID | sum(r.quantity * r.unitPrice) |
|---|---|---|---|
| "1" | "10886" | "77" | 520.0 |
| "1" | "10886" | "31" | 437.5 |
| "1" | "10886" | "10" | 2170.0 |
| "1" | "10387" | "28" | 218.39999999999998 |
| "1" | "10387" | "24" | 54.0 |
| "1" | "10387" | "71" | 258.0 |

Started streaming 2155 records after 12 ms and completed after 13 ms, displaying first 1000 rows.

# Average quantity (number of each product) contained in each order sold by each employee

```
1  MATCH (e:Employee)--(o:Order)-[r:CONTAINS]-(p:Product)
2  RETURN e.employeeID, o.orderID, avg(r.quantity);
```

| e.employeeID | o.orderID | avg(r.quantity) |
|---|---|---|
| "1" | "10886" | 48.333333333333336 |
| "1" | "10387" | 12.0 |
| "1" | "10894" | 66.0 |
| "1" | "10800" | 22.333333333333336 |
| "1" | "10304" | 14.0 |
| "1" | "10292" | 20.0 |

Started streaming 830 records after 6 ms and completed after 45 ms.