1. **Join**

**Problem:** The company wants to send out invitations to all employees whose job tittle ends in the word “ASSOCIATE” for a training which help them will become more efficient and productive.

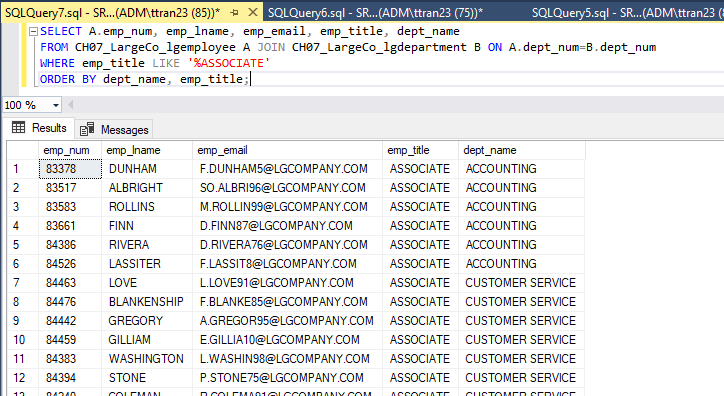
SELECT A.emp\_num, emp\_lname, emp\_email, emp\_title, dept\_name

FROM CH07\_LargeCo\_lgemployee A JOIN CH07\_LargeCo\_lgdepartment B ON A.dept\_num=B.dept\_num

WHERE emp\_title LIKE '%ASSOCIATE'

ORDER BY dept\_name, emp\_title;

Screenshot of output:



**Problem:** Darell Hagan was not happy with his experience in the store with one of our staff so he wanted to get refund and wanted to meet our manager. So, the company wants to know what happened at that time, they want to talk with the manager and the employee.

SELECT A.emp\_fname AS MANAGER\_FNAME, A.emp\_lname AS MANAGER\_LNAME, B.dept\_name, B.dept\_phone,

C.emp\_fname AS EMPLOYEE\_FNAME, C.emp\_lname AS EMPLOYEE\_LNAME, E.cust\_fname AS CUSTOMER\_FNAME,

E.cust\_lname as CUSTOMER\_LANME, D.inv\_date, D.inv\_total AS INV\_TOTAL

FROM [CH07\_LargeCo\_lgemployee] A, [CH07\_LargeCo\_lgdepartment] B,

[CH07\_LargeCo\_lgemployee] C, [CH07\_LargeCo\_lginvoice] D, [CH07\_LargeCo\_lgcustomer] E

WHERE B.emp\_num = A.emp\_num

AND C.emp\_num=D.employee\_id

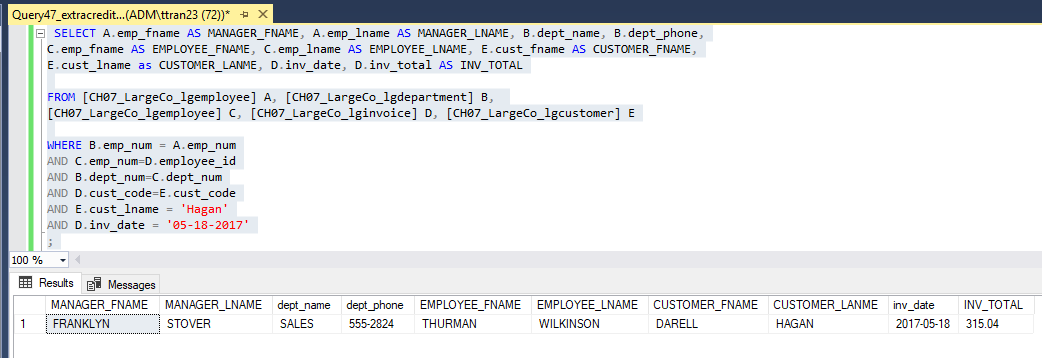
AND B.dept\_num=C.dept\_num

AND D.cust\_code=E.cust\_code

AND E.cust\_lname = 'Hagan'

AND D.inv\_date = '05-18-2017';

Screenshot of output:



1. **Subquery**

**Problem:** The purchasing manager is still concerned about the impact of price on sales.

select A.brand\_name, A.brand\_type, B.prod\_sku, B.prod\_descript, B.prod\_price

from CH07\_LargeCo\_lgbrand A, CH07\_LargeCo\_lgproduct B

where A.brand\_id=B.brand\_id

and A.brand\_type not like '%PREMIUM%'

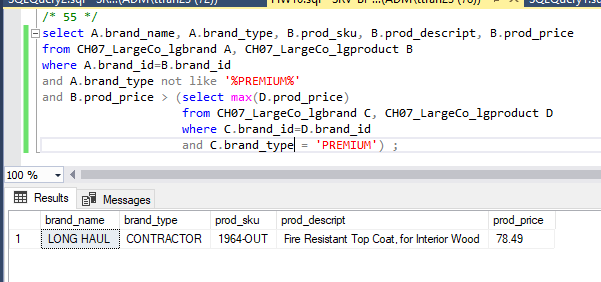
and B.prod\_price > (select max(D.prod\_price)

from CH07\_LargeCo\_lgbrand C, CH07\_LargeCo\_lgproduct D

where C.brand\_id=D.brand\_id

and C.brand\_type = 'PREMIUM') ;

Screenshot of output:



**Problem:** The Binder Prime Company wants to recognize the employee who sold the most of

its products during a specified period between November 1, 2017, and December 5, 2017.

SELECT emp.emp\_num, emp\_fname, emp\_lname, emp\_email, total

FROM CH07\_LargeCo\_lgemployee AS emp INNER JOIN

(SELECT employee\_id, sum(line\_qty) AS total

FROM CH07\_LargeCo\_lginvoice AS i INNER JOIN CH07\_LargeCo\_lgline as l ON i.inv\_num = l.inv\_num

INNER JOIN CH07\_LargeCo\_lgproduct AS p ON l.prod\_sku = p.prod\_sku

INNER JOIN CH07\_LargeCo\_lgbrand AS b ON b.brand\_id = p.brand\_id

WHERE brand\_name = 'Binder Prime'

AND inv\_date BETWEEN '2017-11-01' AND '2017-12-06'

GROUP BY employee\_id) AS sub

ON emp.emp\_num = sub.employee\_id

WHERE total = (SELECT max(total)

FROM (SELECT employee\_id, sum(line\_qty) AS total

FROM CH07\_LargeCo\_lginvoice AS i INNER JOIN CH07\_LargeCo\_lgline as l ON i.inv\_num = l.inv\_num

INNER JOIN CH07\_LargeCo\_lgproduct AS p ON l.prod\_sku = p.prod\_sku

INNER JOIN CH07\_LargeCo\_lgbrand AS b ON b.brand\_id = p.brand\_id

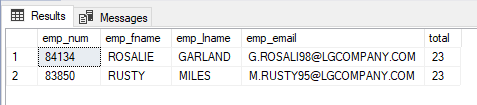
WHERE brand\_name = 'Binder Prime'

AND inv\_date BETWEEN '2017-11-01' AND '2017-12-06'

GROUP BY employee\_id) as sub1)

ORDER BY emp.emp\_lname;

Screenshot of output:



1. **Subquery with Union**

**Problem:** The company is planning a new promotion in Alabama (AL) and wants to know about

the largest purchases made by customers in that state. Even with some customers in AL have not bought anything from our store.

select A.cust\_code, A.cust\_fname, A.cust\_lname, A.cust\_street, A.cust\_city, A.cust\_state, A.cust\_zip, B.inv\_date, B.inv\_total as 'Largest Invoice'

from CH07\_LargeCo\_lgcustomer A, CH07\_LargeCo\_lginvoice B

where A.cust\_code=B.cust\_code

and A.cust\_state = 'AL'

and B.inv\_total= (select max(C.inv\_total) from CH07\_LargeCo\_lginvoice C

where C.cust\_code=A.cust\_code)

union

select A2.cust\_code, A2.cust\_fname, A2.cust\_lname, A2.cust\_street, A2.cust\_city, A2.cust\_state, A2.cust\_zip, Null, 0

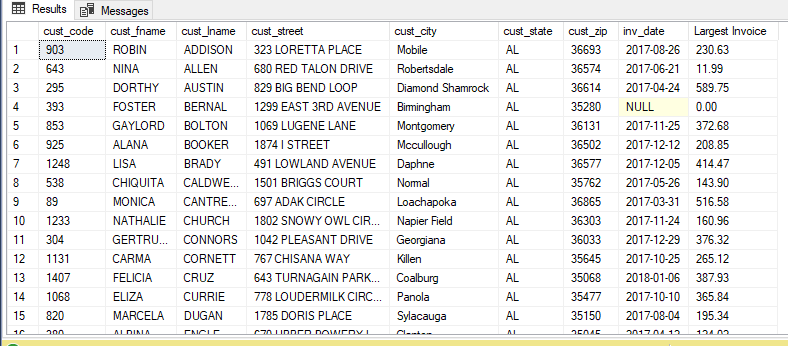
from CH07\_LargeCo\_lgcustomer A2

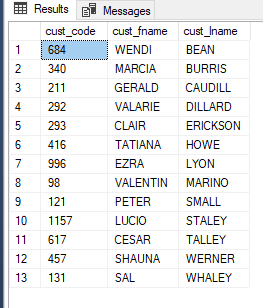
where A2.cust\_state = 'AL'

and A2.cust\_code not in (select B2.cust\_code from CH07\_LargeCo\_lginvoice B2)

order by A.cust\_lname, A.cust\_fname;

Screenshot of output:



**Problem:** The company want to check new employees’ productivity, who has ID: 83649 and 83677.

select distinct X.cust\_code, X.cust\_fname, X.cust\_lname

from

(select A.cust\_code, A.cust\_fname, A.cust\_lname

from CH07\_LargeCo\_lgcustomer A, CH07\_LargeCo\_lginvoice B

where A.cust\_code=B.cust\_code

and B.employee\_id = 83649) as X,

(select C.cust\_code, C.cust\_fname, C.cust\_lname

from CH07\_LargeCo\_lgcustomer C, CH07\_LargeCo\_lginvoice D

where C.cust\_code=D.cust\_code

and D.employee\_id = 83677) as Y

where X.cust\_code=Y.cust\_code

order by X.cust\_lname, X.cust\_fname;

Screenshot of output:

1. **Creating table, Altering table**

CREATE TABLE CUSTOMER (

CUST\_NUM INTEGER PRIMARY KEY,

CUST\_LNAME VARCHAR(30),

CUST\_FNAME VARCHAR(30),

CUST\_BALANCE DECIMAL(8,2));

INSERT INTO CUSTOMER VALUES ('1000', 'Smith', 'Jeanne', '1050.11');

INSERT INTO CUSTOMER VALUES ('1001', 'Orlega', 'Juan', '840.92');

ALTER TABLE CUSTOMER

ADD CUST\_DOB DATE;

UPDATE CUSTOMER

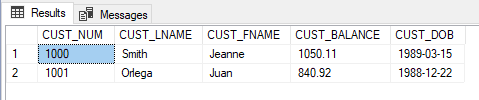
SET CUST\_DOB = 'March 15,1989'

WHERE CUST\_NUM = 1000;

UPDATE CUSTOMER

SET CUST\_DOB = 'December 22,1988'

WHERE CUST\_NUM = 1001;



**Problem:** write the SQL command to add .15 to the EMP\_PCT of the employee whose name is Maria D. Alonzo.

UPDATE EMP\_3

SET EMP\_PCT = (EMP\_PCT + 0.15)

WHERE EMP\_LNAME='Alonzo',EMP\_FNAME='Maria', EMP\_INITIAL='D' ;

