

LAB04: View and Subquery (Solution)

Submission:

- Submit a lab file named “int205_lab04_xxXXXXXXXXXX.docx/.pdf” into the LEB2 system. xxXXXXXXXXXX = your student id

Due Date & Time:

- Lecturer will inform the LAB04 due date and time in lab class.
-

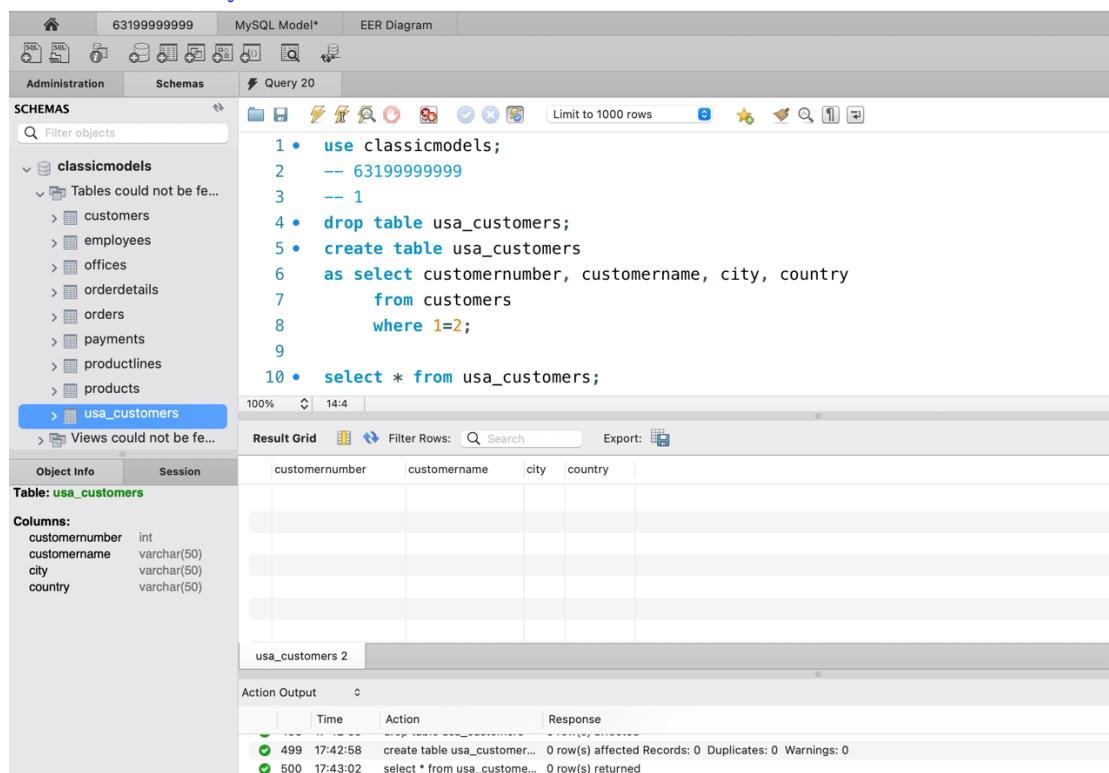
Task 1: Using the “classicmodels” database and write SQL statements to answer the following questions.

use classicmodels;

1. Create a new table named “usa_customers” with copying only the structure of four columns: customernumber, customername, city, country of the "customers" table. Do not copy any data from the "customers" table. Please verify by querying data from the table.

```
drop table usa_customers;
create table usa_customers
as select customernumber, customername, city, country
from customers
where 1=2; -- limit 0; or where false;
```

Note: PK และ FK Constraints ในตาราง customers ไม่ได้ถูก Copy มาใส่ในตาราง usa_customers ด้วย มีเฉพาะ NOT NULL constraints เท่านั้นที่ถูก Copy มาใส่ในตาราง usa_customers ด้วย .



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree, with 'classicmodels' selected. Under 'Tables could not be found', there is a node for 'usa_customers'. The central pane shows a query editor with the following SQL code:

```

1 • use classicmodels;
2 -- 6319999999
3 --
4 • drop table usa_customers;
5 • create table usa_customers
6 as select customernumber, customername, city, country
7     from customers
8     where 1=2;
9
10 • select * from usa_customers;

```

The 'Result Grid' pane below the query editor is empty, indicating no data has been returned yet. The bottom pane shows the 'Action Output' history with two entries:

Action	Time	Response
create table usa_customer...	499 17:42:58	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
select * from usa_custo...	500 17:43:02	0 row(s) returned

2. Insert data by copying the existing data of all customers who live in the USA from the "customers" table into the "usa_customers" table. Please verify by querying data from the table. How many rows are inserted into the "usa_customers" table?

SET AUTOCOMMIT= 0 ; -- คำสั่งนี้ นศ.จะ Run หรือไม่ก็ได้ ถ้า Run หมายถึงต้องการ ยกเลิก auto commit

```
insert into usa_customers
select customernumber,customername, city, country
from customers
where country = 'USA';
select * from usa_customers;
-- 36 rows
```

Note: ถ้า นศ. Run คำสั่ง insert นี้มากกว่า 1 ครั้งจะทำให้มีข้อมูลเพิ่มเข้าไปในตาราง usa_customers ครั้งละ 36 rows และจะทำให้เกิดข้อมูลซ้ำกัน เนื่องจาก ตาราง usa_customers ไม่ได้กำหนด PK จึงทำให้สามารถเพิ่มข้อมูลซ้ำได.

commit;

The screenshot shows the MySQL Workbench interface with the following details:

- Left Panel (Schemas):** Shows the 'classicmodels' schema with tables: customers, employees, offices, orderdetails, orders, payments, productlines, products, and usa_customers.
- Center Panel (Query Grid):** Displays the SQL query and its execution results.


```

12 -- 63199999999
13 --
14 • set autocommit = 0;
15 • insert into usa_customers
16   select customernumber,customername, city, country
17   from customers
18   where country = 'USA';
19
20 • select * from usa_customers;
21 • commit;
22
      
```
- Result Grid:** Shows the data inserted into the usa_customers table.

	customernumber	customername	city	country
▶	112	Signal Gift Stores	Las Vegas	USA
	124	Mini Gifts Distributors Ltd.	San Rafael	USA
	129	Mini Wheels Co.	San Francisco	USA
	131	Land of Toys Inc.	NYC	USA
	151	Muscle Machine Inc	NYC	USA
- Action Output:** Shows the log of actions taken during the session.

	Time	Action	Response
✓	502 17:45:04	set autocommit = 0	0 row(s) affected
✓	503 17:45:08	insert into usa_customers...	36 row(s) affected Records: 36 Duplicates: 0 Warnings: 0
✓	504 17:45:12	select * from usa_custo...	36 row(s) returned
✓	505 17:45:21	commit	0 row(s) affected
✓	506 17:45:26	select * from usa_custo...	36 row(s) returned

3. Based on the "usa_customers" table, modify the city of the customername "Mini Wheels Co." to the same city of the customer number 344 of the "customers" table. Please verify your data modification.

SET SQL_SAFE_UPDATES=0;

-- คำสั่งด้านบน ต้องการยกเลิก Safe Update Mode ให้สามารถ Run คำสั่ง Update หรือ Delete ได้แบบไม่มีข้อจำกัด

```
update usa_customers
set city = (select city
            from customers
            where customernumber =344)
where customername = 'Mini Wheels Co.';
-- 1 row updated
```

```
select * from usa_customers
where customername = 'Mini Wheels Co.';
commit;
```

The screenshot shows the MySQL Workbench interface with the following details:

- Query Editor:** Contains the executed SQL code. The code includes setting SQL_SAFE_UPDATES=0, updating the usa_customers table to set city based on customernumber 344, and committing the changes.
- Result Grid:** Shows the result of the select query. It displays one row with customernumber 129, customername 'Mini Wheels Co.', city 'Madrid', and country 'USA'.
- Action Output:** Displays the log of actions taken during the session, including the update query and its successful execution.
- Schemas:** On the left, the classicmodels schema is selected, showing tables like customers, employees, offices, etc.
- Object Info:** Shows the structure of the usa_customers table, which has columns: customernumber (int), customername (varchar(50)), city (varchar(50)), and country (varchar(50)).

4. Based on the “usa_customers” table, modify the city of all customers who have a sales representative (employee) last named “Patterson” to “Bangmod”. Please verify your data modification.

Hint: you may use the customers and employees tables to find out “who have a sales representative (employee) last named “Patterson”.

-- Ans1

```
update usa_customers
set city = "Bangmod"
where customerNumber IN (select customerNumber
                           from customers c join employees e
                           on e.employeeNumber=c.salesRepEmployeeNumber
                           where lastName="Patterson") ;
```

-- Ans2

```
update usa_customers
set city = "Bangmod"
where customerNumber IN (select customerNumber
                           from customers
                           where salesRepEmployeeNumber IN (select employeeNumber
                           from employees
                           where lastName="Patterson")) ;
```

-- 6 rows updated.

```
select * from usa_customers
where city = "Bangmod";
commit;
```

The screenshot shows the MySQL Workbench interface with the following details:

- Left Panel (Schemas):** Shows the 'classicmodels' schema with its tables: customers, employees, offices, orderdetails, orders, payments, productlines, products, and usa_customers.
- Central Panel (Query Editor):** Displays the following SQL code:


```
35    -- 63199999999
36    -- 4
37 • update usa_customers
38   set city = "Bangmod"
39   where customerNumber IN (select customerNumber
40                           from customers c join employees e
41                           on e.employeeNumber=c.salesRepEmployeeNumber
42                           where lastName="Patterson") ;
43 • select * from usa_customers
44   where city = "Bangmod";
45 • commit;
46
```
- Result Grid:** Shows the 'usa_customers' table with the following data:

customerNumber	customerName	city	country
157	Diecast Classics Inc.	Bangmod	USA
198	Auto-Moto Classics Inc.	Bangmod	USA
286	Marta's Replicas Co.	Bangmod	USA
362	Gifts4AllAges.com	Bangmod	USA
- Action Output:** Shows the history of actions taken:

Time	Action	Response
510 17:51:38	select * from usa_customers;	1 row(s) returned
511 17:53:24	update usa_customers set...	6 row(s) affected Rows matched: 6 Changed: 6 Warnings: 0
512 17:53:42	select * from usa_customers;	6 row(s) returned
513 17:53:50	commit	0 row(s) affected
514 17:53:53	select * from usa_customers;	6 row(s) returned

5. Modify an existing view named "mini_customer_view" to display the customer number, customer name, city and country of all customers whose names start with the word "Mini" from the "usa_customers" table. Name four columns of this view to "cno", "cname", "city" and "country", respectively. Please verify by querying data from this view.

```
create or replace view mini_customer_view (cno, cname, city, country)
```

```
as
```

```
select customernumber, customername, city, country
```

```
from usa_customers
```

```
where customername like 'Mini%';
```

```
select * from mini_customer_view;
```

```
-- 4 rows returned
```

The screenshot shows the MySQL Workbench interface with the following details:

- Query Editor:** Displays the SQL code for creating the view and executing a select statement against it.
- Result Grid:** Shows the data returned by the query, listing four rows from the usa_customers table.
- Object Info:** Provides information about the usa_customers table, including its columns: customernumber (int), customername (varchar(50)), city (varchar(50)), and country (varchar(50)).
- Action Output:** Lists the history of actions taken, including the creation of the view and the execution of the select query.

```

45 •  commit;
46
47 -- 63199999999
48 -- 5
49 •  create or replace view mini_customer_view (cno, cname, city, country)
50 as
51 select customernumber, customername, city, country
52 from usa_customers
53 where customername like 'Mini%';
54
55 •  select * from mini_customer_view;
56

```

cno	cname	city	country
124	Mini Gifts Distributors Ltd.	San Rafael	USA
129	Mini Wheels Co.	Madrid	USA
319	Mini Classics	White Plains	USA
320	Mini Creations Ltd.	New Bedford	USA

Time	Action	Response
513 17:53:50	commit	0 row(s) affected
514 17:53:53	select * from usa_customers where city = "Bangmod" LIMIT 0, 1000	6 row(s) returned
515 17:58:08	create or replace view mini_customer_view (cno, cname, city, country) as select c...	0 row(s) affected
516 17:58:13	select * from mini_customer_view LIMIT 0, 1000	4 row(s) returned

6. Create a view named "miniltd_customer_view" to display the customer number, customer name, city and country of all customers whose names end with the word "Ltd." from the "mini_customer_view" view. Please ensure that the rows that are being changed through this view are conformable to the definition of the "miniltd_customer_view" view. Name four columns of this view to "custno", "cname", "city" and "country", respectively. Please verify by querying data from this view.

```
create or replace view miniltd_customer_view
as
select cno as custno, cname as custname, city as custcity, country as custcountry
from mini_customer_view
where cname like '%Ltd.'
WITH LOCAL CHECK OPTION;

select * from miniltd_customer_view;
-- 2 rows returned.
```

The screenshot shows the MySQL Workbench interface with the following details:

- Top Bar:** Shows the connection name (63199999999) and tabs for MySQL Model*, EER Diagram, SQL, Schemas, and Query 20.
- Schemas Panel:** Shows the 'classicmodels' schema selected. Under 'Tables could not be found', it lists 'customers', 'employees', 'offices', 'orderdetails', 'orders', 'payments', 'productlines', 'products', and 'usa_customers'. Under 'Views could not be found', it lists 'miniltd_customer_view'.
- Query Editor (Query 20):**

```
56
57 -- 63199999999
58 -- 6
59 • create or replace view miniltd_customer_view
60   as
61     select cno as custno, cname as custname, city as custcity, country as custcountry
62       from mini_customer_view
63     where cname like '%Ltd.'
64   WITH LOCAL CHECK OPTION;
65
66 • select * from miniltd_customer_view;
67
```
- Result Grid:** Shows the results of the query 'select * from miniltd_customer_view;'. It displays two rows of data:

	custno	custname	custcity	custcountry
▶	124	Mini Gifts Distributors Ltd.	San Rafael	USA
	320	Mini Creations Ltd.	New Bedford	USA
- Action Output:** Shows the history of actions taken:

	Time	Action	Response
515	17:58:08	create or replace view mini_customer_view (cno, cname, city, country) as select cu...	0 row(s) affected
516	17:58:13	select * from mini_customer_view LIMIT 0, 1000	4 row(s) returned
517	17:59:46	create or replace view miniltd_customer_view as select cno as custno, cname as c...	0 row(s) affected
518	17:59:48	select * from miniltd_customer_view LIMIT 0, 1000	2 row(s) returned

7. Insert new data {customer number "9000", customer name 'SUNISA Ltd.', city 'Texas' and country 'USA'} through the “miniltd_customer_view” view. Please verify by querying data from both this view and the base table. Can the data be inserted through this view? If not, please explain.

```
insert into miniltd_customer_view
values ('9000', 'Sunisa Ltd.', 'Texas', 'USA');
-- 1 row inserted.
```

```
commit;
select * from miniltd_customer_view;
```

/*สาเหตุที่คุณข้อมูลผ่าน View นี้ และไม่เห็น Row ที่เพิ่ง Insert เข้าไป ถูกต้องแล้ว เพราะ ข้อมูลไม่ตรงกับเรื่องไขใน View ที่ซึ่ง
ถูกต้องขึ้นด้วย Mini (เงื่อนไขของ View ในข้อ 5 เมื่อจาก View ในข้อ 6 สร้างโดยอ้างอิง View ในข้อ 5) และลงท้ายด้วย Ltd.
(เงื่อนไขของ View ในข้อ 6) */

The screenshot shows the MySQL Workbench interface. The left sidebar displays the schema structure under 'SCHEMAS'. The 'miniltd_customer_view' view is selected, showing its columns: custno, custname, custcity, and custcountry. The main pane contains the following SQL code:

```
64 WITH LOCAL CHECK OPTION;
65
66 • select * from miniltd_customer_view;
67
68 -- 6319999999
69 -- 7
70 • insert into miniltd_customer_view
71 values ('9000', 'Sunisa Ltd.', 'Texas', 'USA');
72 • commit;
73 • select * from miniltd_customer_view;
74 • select * from usa_customers;
75
```

The 'Result Grid' shows two rows of data from the miniltd_customer_view:

custno	custname	custcity	custcountry
124	Mini Gifts Distributors Ltd.	San Rafael	USA
320	Mini Creations Ltd.	New Bedford	USA

The 'Action Output' pane shows the history of actions:

Time	Action	Response
521 18:01:29	select * from miniltd_customer_view LIMIT 0, 1000	2 row(s) returned
522 18:01:47	Error loading schema content	Error Code: 1356 View 'classicmodels.usa_of'
523 18:02:16	insert into miniltd_customer_view values ('9000', 'Sunisa Ltd.', 'Texas', 'USA')	1 row(s) affected
524 18:02:40	select * from miniltd_customer_view LIMIT 0, 1000	2 row(s) returned

```
select * from usa_customers;
```

-- ข้อมูลที่ Insert ผ่าน View จะถูกนำไป Insert จริงที่ตาราง “usa_customers”

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree, which includes views like 'customer_samecity_view', 'maxcredit_city_view', 'maxcredit_london_view', 'mini_customer_view', and 'miniltd_customer_view'. The 'miniltd_customer_view' node is expanded, showing columns: custno, custname, custcity, and custcountry. The main area contains a SQL query window with the following code:

```

68 -- 63199999999
69 -- 7
70 • insert into miniltd_customer_view
71 values ('9000', 'Sunisa Ltd.', 'Texas', 'USA');
72 • commit;
73 • select * from miniltd_customer_view;
74 • select * from usa_customers;
75
76
77
78
79

```

Below the query window is a 'Result Grid' showing data from the 'usa_customers' table:

customernumber	customername	city	country
475	West Coast Collectables Co.	Burbank	USA
486	Motor Mint Distributors Inc.	Philadelphia	USA
487	Signal Collectibles Ltd.	Brisbane	USA
495	Diecast Collectables	Boston	USA
9000	Sunisa Ltd.	Texas	USA

The 'Action Output' section shows the execution log:

Action	Time	Response
insert into miniltd_customer_view values ('9000', 'Sunisa Ltd.', 'Texas', 'USA')	18:05:18	1 row(s) affected
commit	18:05:22	0 row(s) affected
select * from usa_customers LIMIT 0, 1000	18:05:25	37 row(s) returned

8. Insert new data {customer number "9001", customer name 'Mini SUNISA', city = 'Texas' and country 'USA'} through the “miniltd_customer_view” view. Please verify by querying data from both this view and the base table. Can the data be inserted through this view? If not, please explain.

-- Write a statement(s) here

```
insert into miniltd_customer_view
values ('9009', 'Mini Sunisa', 'Texas', 'USA');
```

-- Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_view'

/* Insert ไม่ได้ เนื่องจากข้อมูลซึ่งลูกค้า ไม่เป็นไปตามเงื่อนไข where cname like '%Ltd.' ของการสร้าง View ในข้อ 6 (โดยไม่ได้ตรวจสอบ where customername like 'Mini%'; ที่ใช้สร้าง View ในข้อ 5 เพราะ ข้อ 6 ระบุ WITH LOCAL CHECK OPTION จึงตรวจสอบเงื่อนไข Where ในข้อ 6 เท่านั้น) */

```

63199999999 MySQL Model* EER Diagram
Administration Schemas Query 20
Limit to 1000 rows
69 -- 7
70 • insert into miniltd_customer_view
71 values ('9000', 'Sunisa Ltd.', 'Texas', 'USA');
72 • commit;
73 • select * from miniltd_customer_view;
74 • select * from usa_customers;
75
76
77 -- 63199999999
78 -- 8
79 • insert into miniltd_customer_view
80 values ('9009', 'Mini Sunisa', 'Texas', 'USA');
81
82
83
84

```

Action Output

Time	Action	Response
18:05:18	insert into miniltd_customer_view values ('9000', 'Su...')	1 row(s) affected
18:05:22	commit	0 row(s) affected
18:05:25	select * from usa_customers LIMIT 0, 1000	37 row(s) returned
18:07:04	insert into miniltd_customer_view values ('9009', 'Mi...')	Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_view'

9. Modify an existing view named the "miniltd_customer_view" created in Question 6 to ensure that the rows that are being changed through this view are conformable to the definition of the "miniltd_customer_view" view and also the definition of the underlying views recursively.

create or replace view miniltd_customer_view

as

select cno custno, cname as custname, city as custcity, country as custcountry
from mini_customer_view
where cname like '%Ltd.'

WITH CASCADED CHECK OPTION;

select * from miniltd_customer_view;

-- 2 rows

```

63199999999 MySQL Model* EER Diagram
Administration Schemas Query 20
Limit to 1000 rows
83 -- 63199999999
84 -- 9
85 • create or replace view miniltd_customer_view
86 as
87 select cno custno, cname as custname, city as custcity, country as custcountry
88 from mini_customer_view
89 where cname like '%Ltd.'
90 WITH CASCADED CHECK OPTION;
91
92 • select * from miniltd_customer_view;

```

Result Grid

custno	custname	custcity	custcountry
124	Mini Gifts Distributors Ltd.	San Rafael	USA
320	Mini Creations Ltd.	New Bedford	USA

Action Output

Time	Action	Response
18:05:18	insert into miniltd_customer_view values ('9000', 'Su...')	1 row(s) affected
18:05:22	commit	0 row(s) affected
18:05:25	select * from usa_customers LIMIT 0, 1000	37 row(s) returned
18:07:04	insert into miniltd_customer_view values ('9009', 'Mi...')	Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_view'
18:08:47	commit	0 row(s) affected
18:08:54	create or replace view miniltd_customer_view as sel...	0 row(s) affected
18:08:57	select * from miniltd_customer_view LIMIT 0, 1000	2 row(s) returned

10. Try to insert the same data of Question 7-8 again.

-- Write a statement(s) here

What happened to the row of the customer name ‘SUNISA Ltd.’? Please verify by querying data from both this view and the base table. Can the data be inserted through this view? If not, please explain.

```
insert into miniltd_customer_view
values ('9000', 'Sunisa Ltd.', 'Thungkru', 'USA');
-- Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_view'
```

What happened to the row of the customer name ‘Mini SUNISA’? Please verify by querying data from both this view and the base table. Can the data be inserted through this view? If not, please explain.

```
insert into miniltd_customer_view
values ('9009', 'Mini Sunisa', 'Thungkru', 'USA');
-- Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_view'
```

/* Insert ไม่สำเร็จทั้ง 2 rows เนื่องจาก View ในข้อ 9 คือ การแก้ไข View ในข้อ 6 โดยเปลี่ยนเป็น WITH CASCaded CHECK OPTION ดังนั้นจะ Insert ผ่าน View นี้ได้ ข้อมูลชื่อลูกค้าต้องเป็นจริงทั้ง 2 เนื่องไข คือ where cname like '%Ltd.' ของการสร้าง View ในข้อ 9 และ where customername like 'Mini%'; ที่ใช้สร้าง View ในข้อ 5 กล่าวคือ ชื่อลูกค้าต้องขึ้นต้นด้วย Mini และ ลงท้ายด้วย Ltd. */

The screenshot shows the MySQL Workbench interface. In the top navigation bar, it says "63199999999" and "MySQL Model". The main area shows the "SCHEMAS" tab with a tree view of database objects. A node for "miniltd_customer_view" is expanded, showing its columns: custno, custname, custcity, and custcountry. Below this, there are several other views like "customer_samecity_view", "maxcredit_city_view", etc. At the bottom left, there's a "View: miniltd_customer_view" section showing the column definitions. On the right, there's a "Query 20" tab with a SQL editor containing the two insertion statements shown above. Below the editor is an "Action Output" pane which displays the execution log. The log shows the following entries:

Action	Time	Response
1	18-05-16 18:05:22	insert into miniltd_customer_view values ('9000', 'Sunisa Ltd.', 'Thungkru', 'USA'); 1 row(s) affected
2	18:05:22	commit 0 row(s) affected
3	18:05:25	select * from usa_customers LIMIT 0, 1000 37 row(s) returned
4	18:07:04	Insert into miniltd_customer_view values ('9009', 'Mini Sunisa', 'Texas',... Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_v... 0 row(s) affected
5	18:08:47	commit 0 row(s) affected
6	18:08:54	create or replace view miniltd_customer_view as select cno custno, cn... 0 row(s) affected
7	18:08:57	select * from miniltd_customer_view LIMIT 0, 1000 2 row(s) returned
8	18:10:45	insert into miniltd_customer_view values ('9000', 'Sunisa Ltd.', 'Thungkru', 'USA'); Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_v... 0 row(s) affected
9	18:11:34	insert into miniltd_customer_view values ('9009', 'Mini Sunisa', 'Thungkru', 'USA'); Error Code: 1369. CHECK OPTION failed 'classicmodels.miniltd_customer_v... 0 row(s) affected

11. Please insert one row through the “miniltd_customer_view” view. You should create the data by yourself that can be inserted through this view. Please verify by querying data from both the views and the base table.

```
insert into miniltd_customer_view
```

```
values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA');
```

```
select * from miniltd_customer_view;
```

/*สาเหตุที่ดูข้อมูลผ่าน View นี้ และเห็น Row ที่เพิ่ง Insert เข้าไป เพราะ ข้อมูลตรงกับเงื่อนไขใน View ที่ชื่อ ลูกค้าต้องเป็นต้นด้วย

Mini และลงท้ายด้วย Ltd.*/

The screenshot shows the MySQL Workbench interface. In the left sidebar, under 'SCHEMAS', the 'miniltd_customer_view' view is selected. The 'Object Info' tab shows the view definition:

```
105
106
107
108
109 -- 63199999999
110 -- 11
111 • insert into miniltd_customer_view
112 values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA');
113 • commit;
114 • select * from miniltd_customer_view;
```

The 'Result Grid' pane displays the data:

custno	custname	custcity	custcountry
124	Mini Gifts Distributors Ltd.	San Rafael	USA
320	Mini Creations Ltd.	New Bedford	USA
9999	Mini Sunisa Ltd.	Thungkru	USA

The 'Action Output' pane shows the log of actions:

Time	Action	Response
10 18:12:51	insert into miniltd_customer_view values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA')	1 row(s) affected
11 18:13:12	commit	0 row(s) affected
12 18:13:14	select * from miniltd_customer_view LIMIT 0, 1000	5 row(s) returned
13 18:14:54	select * from miniltd_customer_view LIMIT 0, 1000	3 row(s) returned

```
select * from mini_customer_view;
```

/*สาเหตุที่ดูข้อมูลผ่าน View นี้ และเห็น Row ที่เพิ่ง Insert เข้าไป เพราะ ข้อมูลตรงกับเงื่อนไขใน View ที่ชื่อ ลูกค้าต้องเป็นต้นด้วย

Mini */

The screenshot shows the MySQL Workbench interface. In the left sidebar, under 'SCHEMAS', the 'mini_customer_view' view is selected. The 'Object Info' tab shows the view definition:

```
106
107
108
109 -- 63199999999
110 -- 11
111 • insert into miniltd_customer_view
112 values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA');
113 • commit;
114 • select * from mini_customer_view;
115
```

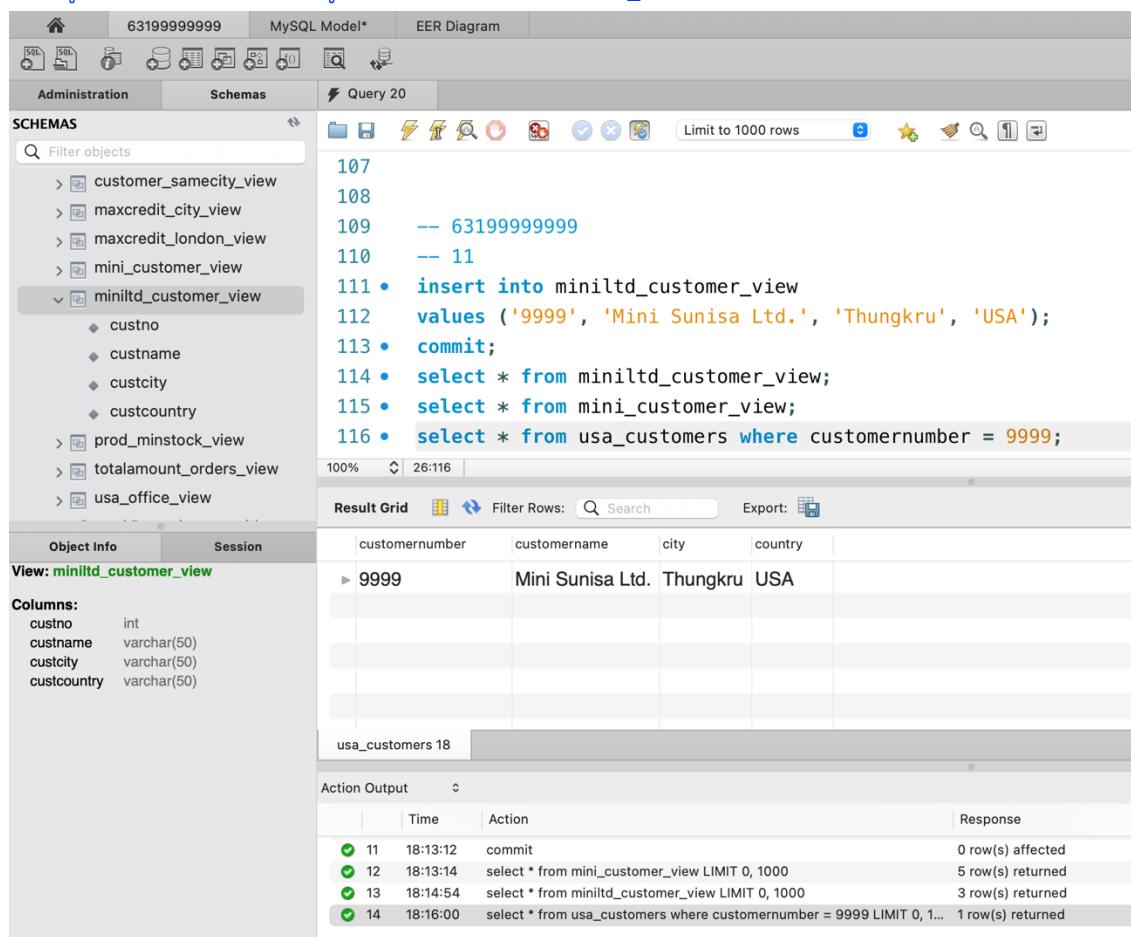
The 'Result Grid' pane displays the data:

cno	cname	city	country
124	Mini Gifts Distributors Ltd.	San Rafael	USA
129	Mini Wheels Co.	Madrid	USA
319	Mini Classics	White Plains	USA
320	Mini Creations Ltd.	New Bedford	USA
9999	Mini Sunisa Ltd.	Thungkru	USA

The 'Action Output' pane shows the log of actions:

Time	Action	Response
9 18:11:34	insert into miniltd_customer_view values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA')	Error Code: 1369. CHECK OPTION failed 'classicmodels'. 1 row(s) affected
10 18:12:51	insert into miniltd_customer_view values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA')	1 row(s) affected
11 18:13:12	commit	0 row(s) affected
12 18:13:14	select * from mini_customer_view LIMIT 0, 1000	5 row(s) returned

`select * from usa_customers where customernumber = 9999;`
-- ข้อมูลที่ Insert ผ่าน View จะถูกนำไป Insert จริงที่ตาราง “usa_customers”



The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** The left sidebar shows the schema structure, including views like `customer_samecity_view`, `maxcredit_city_view`, `maxcredit_london_view`, `mini_customer_view`, and `miniltd_customer_view`.
- Query Grid:** The main area displays the following SQL code:

```

107
108
109 -- 63199999999
110 -- 11
111 • insert into miniltd_customer_view
112 values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA');
113 • commit;
114 • select * from miniltd_customer_view;
115 • select * from mini_customer_view;
116 • select * from usa_customers where customernumber = 9999;
    
```
- Result Grid:** The results of the last query show one row:

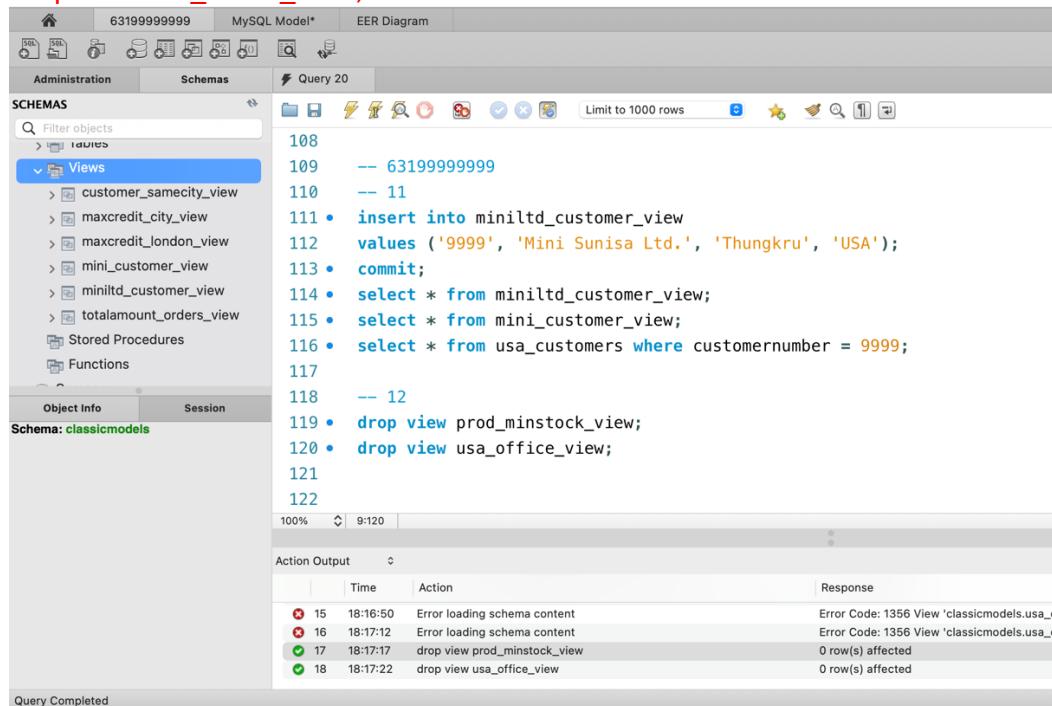
	customernumber	customername	city	country
	9999	Mini Sunisa Ltd.	Thungkru	USA
- Action Output:** The log shows the following actions:

	Time	Action	Response
11	18:13:12	commit	0 row(s) affected
12	18:13:14	select * from mini_customer_view LIMIT 0, 1000	5 row(s) returned
13	18:14:54	select * from miniltd_customer_view LIMIT 0, 1000	3 row(s) returned
14	18:16:00	select * from usa_customers where customernumber = 9999 LIMIT 0, 1...	1 row(s) returned

12. Remove two existing views that were created in Lab03. You can select two views by yourself.

`drop view prod_minstock_view;`

`drop view usa_office_view;`



The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** The left sidebar shows the schema structure, including views like `customer_samecity_view`, `maxcredit_city_view`, `maxcredit_london_view`, `mini_customer_view`, `miniltd_customer_view`, and `totalamount_orders_view`.
- Query Grid:** The main area displays the following SQL code:

```

108
109 -- 63199999999
110 -- 11
111 • insert into miniltd_customer_view
112 values ('9999', 'Mini Sunisa Ltd.', 'Thungkru', 'USA');
113 • commit;
114 • select * from miniltd_customer_view;
115 • select * from mini_customer_view;
116 • select * from usa_customers where customernumber = 9999;
117
118 -- 12
119 • drop view prod_minstock_view;
120 • drop view usa_office_view;
121
122
    
```
- Action Output:** The log shows the following errors and successes:

	Time	Action	Response
15	18:16:50	Error loading schema content	Error Code: 1356 View 'classicmodels.usa_o'
16	18:17:12	Error loading schema content	Error Code: 1356 View 'classicmodels.usa_o'
17	18:17:17	drop view prod_minstock_view	0 row(s) affected
18	18:17:22	drop view usa_office_view	0 row(s) affected