

```

bash-4.2$ cd 31255
bash-4.2$ scp Assignment3.odt student@10.10.11.116:/home/student/DBMS-M2/T31255
ssh: connect to host 10.10.11.116 port 22: No route to host
lost connection
bash-4.2$ mysql -h 10.10.10.54 -u t31255 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 61
Server version: 5.5.43-MariaDB MariaDB Server

```

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```

mysql> select * from information_schema.user;
ERROR 1109 (42S02): Unknown table 'user' in information_schema
mysql> show databases;

```

```

+-----+
| Database      |
+-----+
| information_schema |
| t31255db      |
+-----+
2 rows in set (0.01 sec)

```

```

mysql> select * from t31255db.Customer;

```

```

+-----+-----+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | cust_company | cust_addr | city | cust_phone |
+-----+-----+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Birla | Khargar | Mumbai | 222222222 |
| 3 | Salman | Khan | Lodha | Khopoli | Mumbai | 333333333 |
| 5 | Harmanpreet | Kaur | Jio | MG Road | Bangalore | 555555555 |
| 6 | Smriti | Mandhana | Jio | MG Road | Delhi | 666666666 |
| 7 | Shalini | Mitra | Bengal Sweets | Rasgulla | Kolkata | 777777777 |
| 9 | Shikhar | Dhawan | Porsche | Andheri | Mumbai | 999999999 |
| 10 | Cristiano | Ronaldo | Juventus | Port Cris | Lisbon | 909090909 |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

```

mysql> mysql> select * from t31255db.Customer;

```

```

+-----+-----+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | cust_company | cust_addr | city | cust_phone |
+-----+-----+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Birla | Khargar | Mumbai | 222222222 |
| 3 | Salman | Khan | Lodha | Khopoli | Mumbai | 333333333 |
| 5 | Harmanpreet | Kaur | Jio | MG Road | Bangalore | 555555555 |
| 6 | Smriti | Mandhana | Jio | MG Road | Delhi | 666666666 |
| 7 | Shalini | Mitra | Bengal Sweets | Rasgulla | Kolkata | 777777777 |
| 9 | Shikhar | Dhawan | Porsche | Andheri | Mumbai | 999999999 |
| 10 | Cristiano | Ronaldo | Juventus | Port Cris | Lisbon | 909090909 |
+-----+-----+-----+-----+-----+-----+

```

7 rows in set (0.00 sec)

```
mysql> select * from information_schema.table_constraints;
```

CONSTRAINT_CATALOG	CONSTRAINT_SCHEMA	CONSTRAINT_NAME	TABLE_SCHEMA	TABLE_NAME	CONSTRAINT_TYPE
def	t31255db	PRIMARY	t31255db	Customer	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	author	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	book	PRIMARY KEY
def	t31255db	book_ibfk_1	t31255db	book	FOREIGN KEY
def	t31255db	book_ibfk_2	t31255db	book	FOREIGN KEY
def	t31255db	book_ibfk_3	t31255db	book	FOREIGN KEY
def	t31255db	book_ibfk_4	t31255db	book	FOREIGN KEY
def	t31255db	PRIMARY	t31255db	orders	PRIMARY KEY
def	t31255db	orders_ibfk_1	t31255db	orders	FOREIGN KEY
def	t31255db	orders_ibfk_2	t31255db	orders	FOREIGN KEY
def	t31255db	orders_ibfk_3	t31255db	orders	FOREIGN KEY
def	t31255db	orders_ibfk_4	t31255db	orders	FOREIGN KEY
def	t31255db	PRIMARY	t31255db	publisher	PRIMARY KEY

13 rows in set (0.00 sec)

```
mysql> use t31255db;
```

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

```
mysql> alter table book drop foreign key book_ibfk_1;
```

Query OK, 8 rows affected (0.10 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> alter table book drop foreign key book_ibfk_2;
```

Query OK, 8 rows affected (0.07 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> alter table book drop foreign key book_ibfk_3;
```

Query OK, 8 rows affected (0.07 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> alter table book drop foreign key book_ibfk_4;
```

Query OK, 8 rows affected (0.08 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> alter table orders drop foreign key orders_ibfk_1;
```

Query OK, 5 rows affected (0.25 sec)

Records: 5 Duplicates: 0 Warnings: 0

```
mysql> alter table orders drop foreign key orders_ibfk_2;
```

Query OK, 5 rows affected (0.08 sec)

Records: 5 Duplicates: 0 Warnings: 0

```
mysql> alter table orders drop foreign key orders_ibfk_3;
```

Query OK, 5 rows affected (0.09 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> alter table orders drop foreign key orders_ibfk_4;

Query OK, 5 rows affected (0.08 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> desc book;

Field	Type	Null	Key	Default	Extra
isbn	int(11)	NO	PRI	NULL	
title	varchar(20)	YES		NULL	
unit_price	float	YES		NULL	
author_no	int(11)	YES	MUL	NULL	
publisher_no	int(11)	YES	MUL	NULL	
pub_year	year(4)	YES		NULL	

6 rows in set (0.00 sec)

mysql> select * from information_schema.table_constraints;

CONSTRAINT_CATALOG	CONSTRAINT_SCHEMA	CONSTRAINT_NAME	TABLE_SCHEMA	TABLE_NAME	CONSTRAINT_TYPE
def	t31255db	PRIMARY	t31255db	Customer	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	author	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	book	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	orders	PRIMARY KEY
def	t31255db	PRIMARY	t31255db	publisher	PRIMARY KEY

5 rows in set (0.00 sec)

mysql> alter table Customer drop primary key;

Query OK, 7 rows affected (0.08 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> alter table author drop primary key;

Query OK, 3 rows affected (0.08 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> alter table book drop primary key;

Query OK, 8 rows affected (0.09 sec)

Records: 8 Duplicates: 0 Warnings: 0

mysql> alter table orders drop primary key;

Query OK, 5 rows affected (0.10 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> alter table publisher drop primary key;

Query OK, 3 rows affected (0.08 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select * from information_schema.table_constraints;

Empty set (0.00 sec)

1. Find Customer details and order details using NATURAL JOIN.

```
mysql> select * from Customer natural join orders;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | cust_company | cust_addr | city | cust_phone | order_no | isbn | qty | odate |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | Salman | Khan | Lodha | Khopoli | Mumbai | 3333333333 | 1 | 103 | 5 | 2019-06-06 |
| 2 | Harshal | Kapoor | Birla | Khargar | Mumbai | 2222222222 | 2 | 102 | 7 | 2019-07-02 |
| 7 | Shalini | Mitra | Bengal Sweets | Rasgulla | Kolkata | 7777777777 | 3 | 106 | 4 | 2019-06-09 |
| 7 | Shalini | Mitra | Bengal Sweets | Rasgulla | Kolkata | 7777777777 | 4 | 1234 | 10 | 2019-07-01 |
| 3 | Salman | Khan | Lodha | Khopoli | Mumbai | 3333333333 | 9 | 344 | 7 | 2019-07-02 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

2. Find the book_title, author_name, country. (INNER JOIN)

```
mysql> select title,author_name,country from book inner join author using(author_no);
```

```
+-----+-----+-----+
| title | author_name | country |
+-----+-----+-----+
| Hindi | Robin Sharma | India |
| Stranger Things | Nicholas Flamel | Australia |
| La La Land | Will Smith | Kenya |
| Mathematics | Will Smith | Kenya |
| Science | Robin Sharma | India |
| English | Nicholas Flamel | Australia |
| mysql | Robin Sharma | India |
| German | Will Smith | Kenya |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

3. Find the customer ID, name and order_no of customers who have never placed an order. (LEFT/RIGHT)

```
mysql> select Customer.cust_no,cust_fname,cust_lname,order_no from Customer left join orders using(cust_no);
```

```
+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | order_no |
+-----+-----+-----+-----+
| 3 | Salman | Khan | 1 |
| 2 | Harshal | Kapoor | 2 |
| 7 | Shalini | Mitra | 3 |
| 7 | Shalini | Mitra | 4 |
| 3 | Salman | Khan | 9 |
| 5 | Harmanpreet | Kaur | NULL |
| 6 | Smriti | Mandhana | NULL |
| 9 | Shikhar | Dhawan | NULL |
| 10 | Cristiano | Ronaldo | NULL |
+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

4. Find the Title, ISBN, order_no of the books for which order is not placed. (LEFT/RIGHT)

```
mysql> select title,book.isbn,order_no from orders right join book using(isbn);
```

title	isbn	order_no
La La Land	103	1
Stranger Things	102	2
English	106	3
German	1234	4
mysql	344	9
Hindi	101	NULL
Mathematics	104	NULL
Science	105	NULL

8 rows in set (0.00 sec)

5. Display cust_fname, title,author_no,publisher_year where ISBN=1234. (JOINING more than 2 tables)

```
mysql> select cust_fname,title,author_no,pub_year from Customer join orders using(cust_no) join book using(isbn) where isbn=1234;
```

cust_fname	title	author_no	pub_year
Shalini	German	79	2013

1 row in set (0.00 sec)

6. Display the total number of books and customer name.(USE OF COUNT, ANY JOIN)

```
mysql> select cust_fname,count(qty) from Customer left join orders using(cust_no) left join book using(isbn) group by Customer.cust_no;
```

cust_fname	count(qty)
Harshal	1
Salman	2
Rohit	0
Harmanpreet	0
Smriti	0
Shikhar	0
Cristiano	0

7 rows in set (0.00 sec)

7. List the cust_id, order_no and ISBN with books having title 'mysql'. (sub query- IN)

```
mysql> select Customer.cust_no,orders.order_no,isbn from Customer join orders using(cust_no) where isbn in(select isbn from book where title='mysql');
```

cust_no	order_no	isbn
3	9	344

1 row in set (0.00 sec)

8. Find the names of all the companies that ordered books in the year 2015. (sub query, Between)

```
mysql> select distinct(cust_company) from Customer join orders using(cust_no) where odate in(select odate from orders where odate between '2015-01-01' and '2015-12-31');
```

```
+-----+
| cust_company |
+-----+
| Lodha      |
| Birla      |
+-----+
2 rows in set (0.00 sec)
```

9. Create view showing the author and book details. (COMPLEX VIEW)

```
mysql> create view view1 as select b.isbn,b.title,a.author_no,a.author_name from book
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> select * from view1;
+-----+-----+-----+-----+
| isbn | title      | author_no | author_name |
+-----+-----+-----+-----+
| 101 | Hindi      | 70 | Robin Sharma |
| 102 | Stranger Things | 78 | Nicholas Flamel |
| 103 | La La Land | 79 | Will Smith |
| 104 | Mathematics | 79 | Will Smith |
| 105 | Science    | 70 | Robin Sharma |
| 106 | English    | 78 | Nicholas Flamel |
| 344 | mysql      | 70 | Robin Sharma |
| 1234 | German     | 79 | Will Smith |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

10. Perform Manipulation on simple view-Insert, update, delete, drop view.

```
mysql> create view customer_view as
-> select cust_no,cust_fname,cust_lname,city
-> from Customer;
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> select * from customer_view;
+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | city |
+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Mumbai |
| 3 | Salman | Khan | Mumbai |
| 5 | Harmanpreet | Kaur | Bangalore |
| 6 | Smriti | Mandhana | Delhi |
| 7 | Shalini | Mitra | Kolkata |
| 9 | Shikhar | Dhawan | Mumbai |
| 10 | Cristiano | Ronaldo | Lisbon |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> insert into customer_view values(
```

```
-> 4,'Rohit','Sharma','Delhi');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from customer_view;
+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | city |
+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Mumbai |
| 3 | Salman | Khan | Mumbai |
| 5 | Harmanpreet | Kaur | Bangalore |
| 6 | Smriti | Mandhana | Delhi |
| 7 | Shalini | Mitra | Kolkata |
| 9 | Shikhar | Dhawan | Mumbai |
| 10 | Cristiano | Ronaldo | Lisbon |
| 4 | Rohit | Sharma | Delhi |
+-----+-----+-----+-----+
8 rows in set (0.01 sec)
```

```
mysql> update customer_view set cust_no=8 where cust_no=9;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysql> select * from customer_view;
+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | city |
+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Mumbai |
| 3 | Salman | Khan | Mumbai |
| 5 | Harmanpreet | Kaur | Bangalore |
| 6 | Smriti | Mandhana | Delhi |
| 7 | Shalini | Mitra | Kolkata |
| 8 | Shikhar | Dhawan | Mumbai |
| 10 | Cristiano | Ronaldo | Lisbon |
| 4 | Rohit | Sharma | Delhi |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
mysql> delete from customer_view where cust_no=7;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from customer_view;
+-----+-----+-----+-----+
| cust_no | cust_fname | cust_lname | city |
+-----+-----+-----+-----+
| 2 | Harshal | Kapoor | Mumbai |
| 3 | Salman | Khan | Mumbai |
| 5 | Harmanpreet | Kaur | Bangalore |
| 6 | Smriti | Mandhana | Delhi |
| 8 | Shikhar | Dhawan | Mumbai |
| 10 | Cristiano | Ronaldo | Lisbon |
| 4 | Rohit | Sharma | Delhi |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

```
mysql> drop view customer_view;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> select * from customer_view;
```

ERROR 1146 (42S02): Table 't31255db.customer_view' doesn't exist