Lesson 02 Demo 03

Working with Subqueries

Objective: To use subqueries in MySQL

Tools required: MySQL

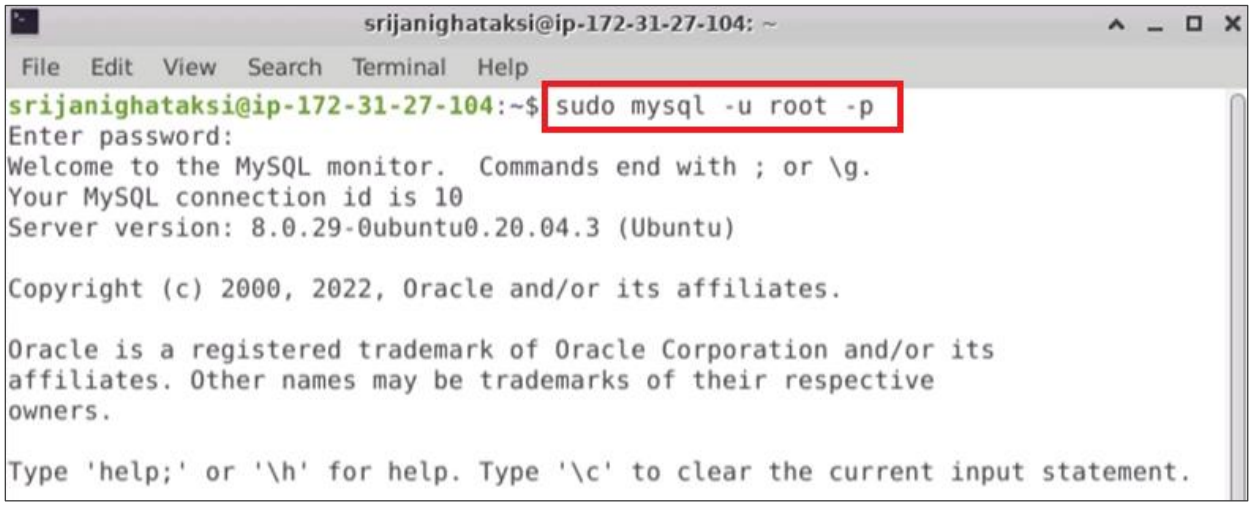
Prerequisites: SQL

Steps to be followed:

1. Create a new table Employee
2. Use a subquery with select
3. Create new tables named Product and Order
4. Insert records in Order
5. Update records of Employee
6. Delete records from Employee

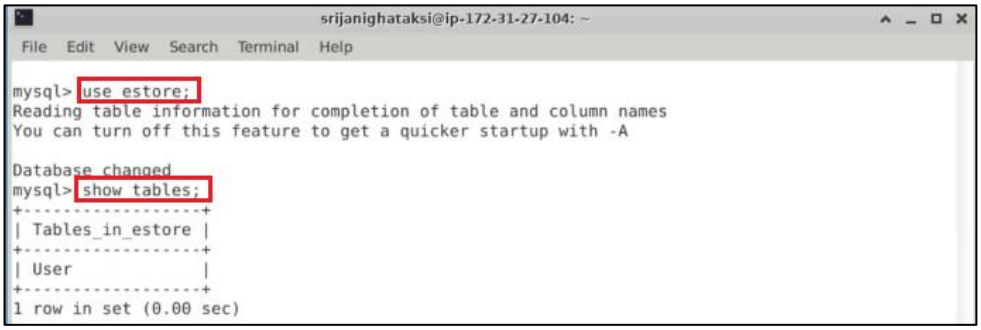
Step 1: Create a new table Employee

1.1 Login to the terminal of lab and type the following command to open MySQL shell:
sudo mysql -u root -p (password is empty for this root user)



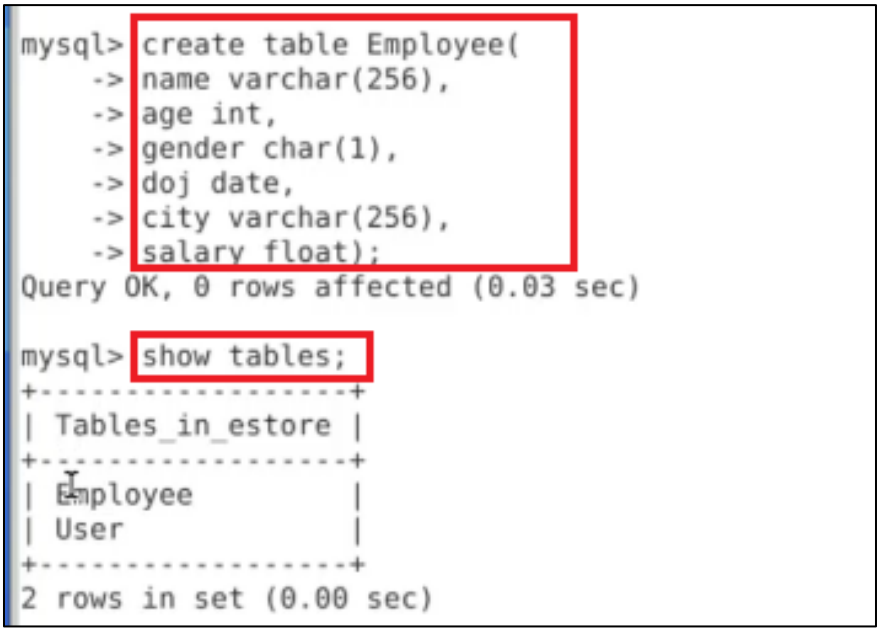
1.2 Switch to the estore database and then show all the tables using the below commands:

use estore;
show tables;



1.3 Create a table Employee using the following commands:

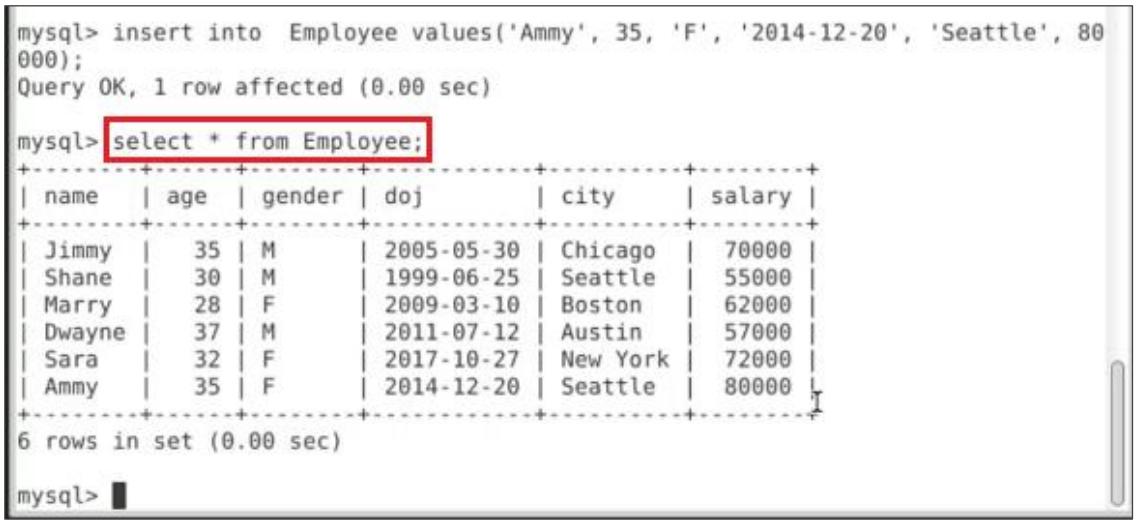
create table Employee(
name varchar(256),
age int,
gender char(1),
doj date,
city varchar(256),
salary float);
show tables;



1.4 Add records in **Employee** as per the below screenshot:

1.5 Show the records from **Employee** using the below commands:

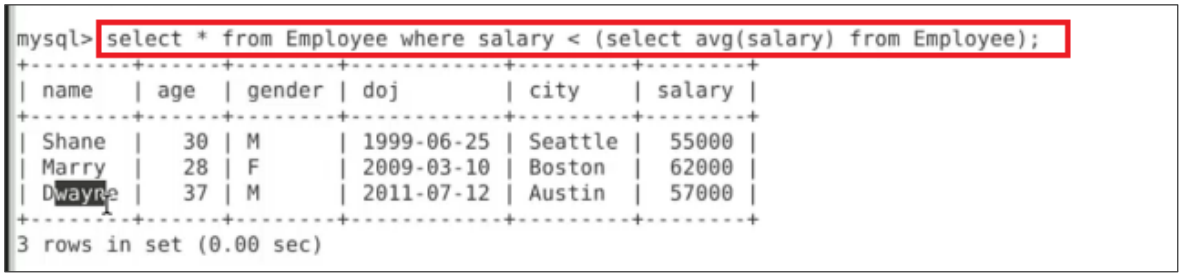
select * from Employee;



Step 2: Use a subquery with select

2.1 Show all the results from **Employee** where individual salary is less than the average salary of the table **Employee** using the commands given below:

select * from Employee where salary < (select avg(salary) from Employee);



Step 3: Create new tables named Product and orders

3.1 Create table **Products** as per the below screenshot:

```
mysql> create table Products(
    -> pid int,
    -> item varchar(256),
    -> sell_price float,
    -> product_type varchar(256));
Query OK, 0 rows affected (0.03 sec)
```

3.2 Add records in **Products** as per the screenshot below:

insert into Employee values('Jimmy', 35, Untitled-1 ● insert into products values(101, 'Jewell Untitled-2 ●

```
1  insert into products values(101, 'Jewellery', 1800, 'Luxury');
2  insert into products values(102, 'T-Shirt', 100, 'Non-Luxury');
3  insert into products values(103, 'Laptop', 1300, 'Luxury');
4  insert into products values(104, 'Table', 400, 'Non-Luxury');
```

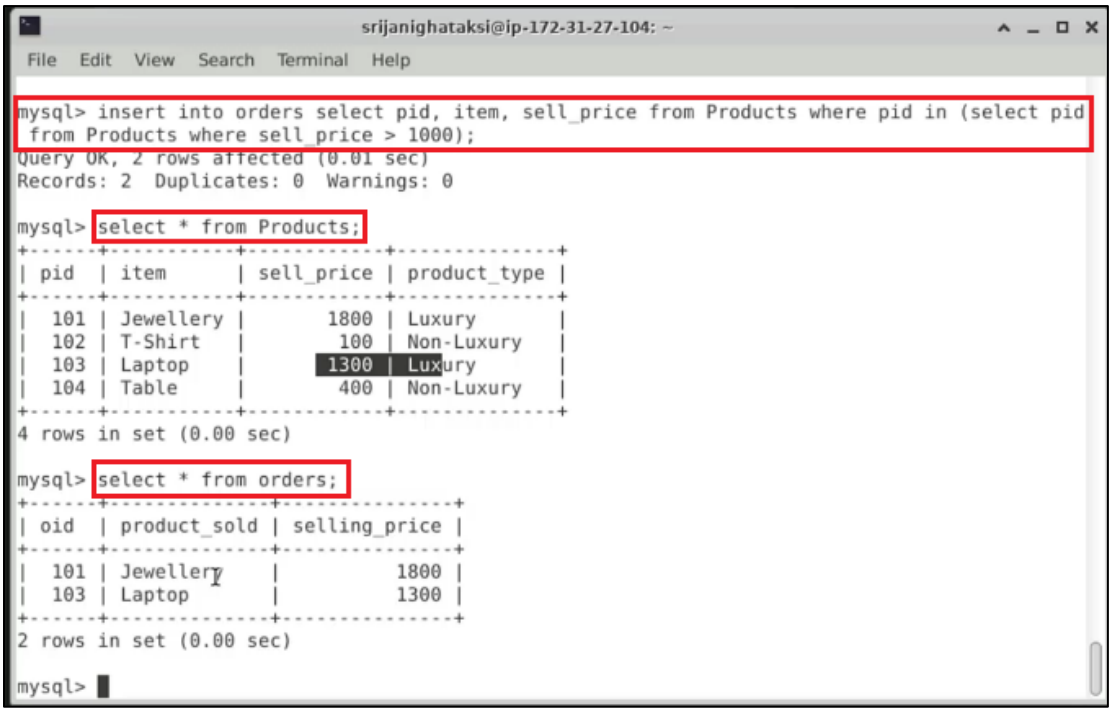
3.3 Create table **orders** as per the below screenshot:

```
mysql> create table orders(
    -> oid int,
    -> product_sold varchar(256),
    -> selling_price float);
Query OK, 0 rows affected (0.03 sec)
```

Step 4: Insert records in orders

4.1 Insert records in **orders** table from **Products** where sell price is greater than 1000. using the following command:

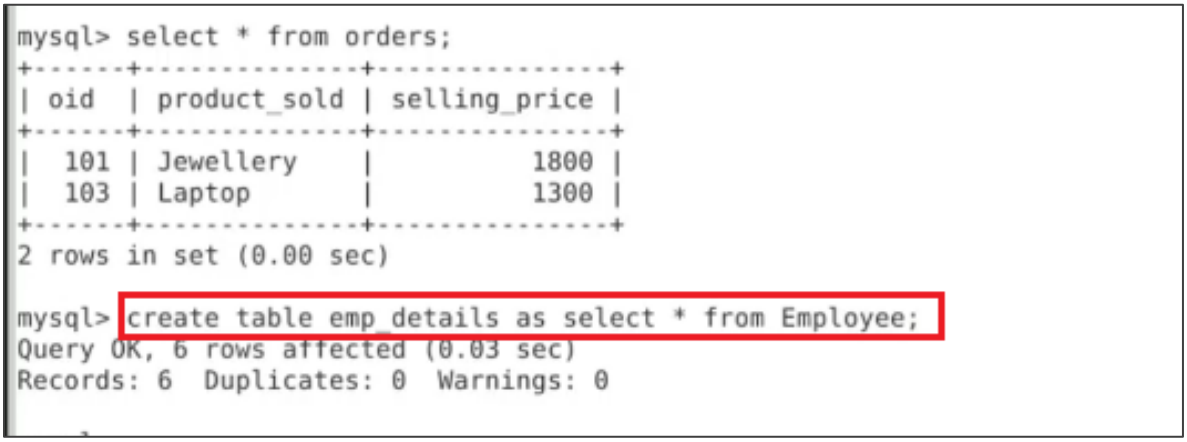
insert into orders pid, item, sell_price from Products where pid in (select pid from products where sell_price > '1000';
select * Products;
select * orders;



Step 5: Update records of Employee

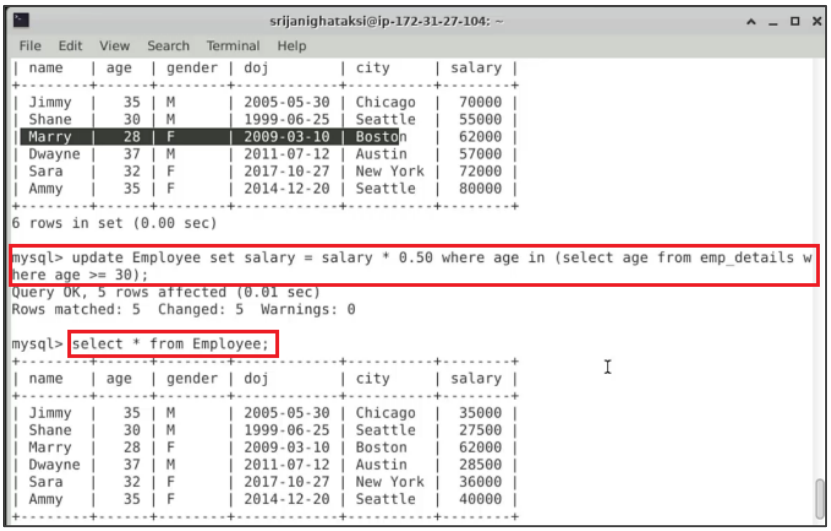
5.1 Create a new table **emp_details** using the following command:

create table emp_details as select * Employee;



5.2 Update salary column of **Employee** table for the employees whose age is above 30 in **emp_details** using the following command:

update Employee set salary = salary * 0.5 where age in (select age from emp_details where age >= 30);
select * from Employee;



Step 6: Delete records from Employee

6.1 Delete the records where age is greater than or equal to 35 using the following command:

delete from Employee where age in (select age from emp_details where age >=35);
select * Employee;