CS-313 - Assignment 3

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Answer 1

create user lab3@localhost identified by 'Password*123';
grant all privileges on lab3.* to lab3@localhost;
mysql -u lab3 -p
Password*123
create database lab3;
use lab3;

```
mysql> create user lab3@localhost identified by 'Password*123';
Query OK, 0 rows affected (0.07 sec)

mysql> grant all privileges on lab3.* to lab3@localhost;
Query OK, 0 rows affected (0.02 sec)
```

```
monusoyal@DESKTOP-C7BLGHJ:~$ mysql -u lab3 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.30-0ubuntu0.22.04.1 (Ubuntu)

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owners.

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

mysql>
```

```
mysql> create database lab3;
Query OK, 1 row affected (0.02 sec)

mysql> use lab3;
Database changed
```

Answer 2

```
- - creating the part table
create table part (
part_no int,
part_name varchar(30),
color varchar(50),
weight float,
primary key(part_no)
);

- - creating the supplier table

create table supplier(
supplier_no int,
sup_name varchar(30),
city varchar(50),
bank varchar(20),
primary key(supplier_no)
);

- - creating the shipment table

create table shipment(
shipment_no int,
part_no int,
supplier_no int,
date varchar(20),
quantity int,
price float,
primary key(shipment_no),
foreign key(part_no) references part(part_no),
foreign key(supplier_no) references
supplier(supplier_no)
);
```

```
mysql>  create table part (part_no int, part_name varchar(30), color varchar(50),weight float, primary key(part_no));
Query OK, 0 rows affected (0.07 sec)

mysql> show tables;
+----------------+
| Tables_in_lab3 |
+----------------+
| part           |
+----------------+
1 row in set (0.00 sec)
```

```
mysql>  create table supplier (supplier_no int, sup_name varchar(30), city varchar(50), bank varchar(20), primary key(supplier_no));
Query OK, 0 rows affected (0.10 sec)

mysql> show tables;
+----------------+
| Tables_in_lab3 |
+----------------+
| part           |
| supplier       |
+----------------+
2 rows in set (0.01 sec)
```

```
mysql> create table shipment (
    -> shipment_no int,
    -> part_no int,
    -> supplier_no int,
    -> date varchar(20),
    -> quantity int,
    -> price float,
    -> primary key(shipment_no),
    -> foreign key(part_no) references part(part_no),
    -> foreign key(supplier_no) references supplier(supplier_no));
Query OK, 0 rows affected (0.51 sec)

mysql> show tables;
+----------------+
| Tables_in_lab3 |
+----------------+
| part           |
| shipment       |
| supplier       |
+----------------+
3 rows in set (0.00 sec)
```

Answer 3

- - For part table
insert into part
values(1, "partname1", "red", 100);

- - For supplier table

insert into supplier
values(01, "supplier_1", "Mumbai", "BOB");

- - For shipment table

insert into shipment
values(1, 1, 1, "2/9/2022", 10, 100000.0);

```
mysql> insert into part
    -> values(1, "partname1", "red", 100);
Query OK, 1 row affected (0.03 sec)

mysql> select * from part;
+---------+-----------+-------+--------+
| part_no | part_name | color | weight |
+---------+-----------+-------+--------+
|       1 | partname1 | red   |    100 |
+---------+-----------+-------+--------+
```

```
mysql> insert into supplier
    -> values(01, "supplier_1", "Mumbai", "BOB");
Query OK, 1 row affected (0.01 sec)

mysql> select * from supplier;
+-------------+------------+--------+------+
| supplier_no | sup_name   | city   | bank |
+-------------+------------+--------+------+
|           1 | supplier_1 | Mumbai | BOB  |
+-------------+------------+--------+------+
1 row in set (0.00 sec)
```

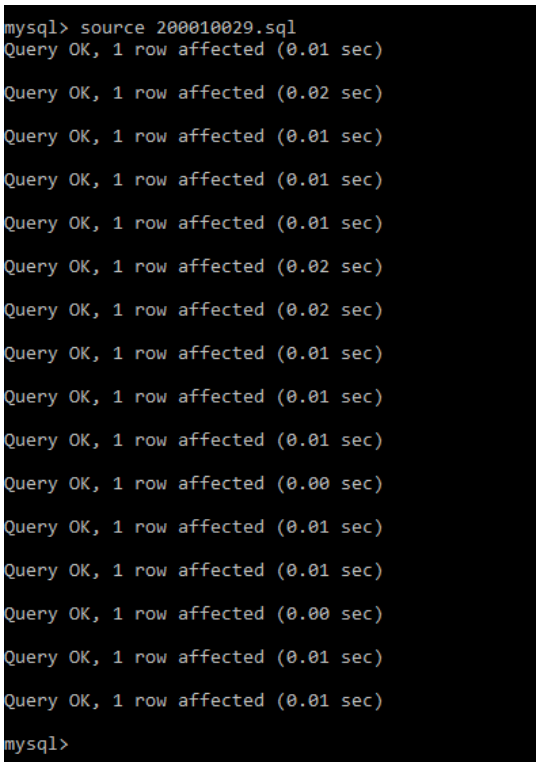
```
mysql> insert into shipment
    -> values(1, 1, 1, "2/9/2022", 10, 100000.0);
Query OK, 1 row affected (0.02 sec)

mysql> select * from shipment;
+-------------+---------+-------------+----------+----------+--------+
| shipment_no | part_no | supplier_no | date     | quantity | price  |
+-------------+---------+-------------+----------+----------+--------+
|           1 |       1 |           1 | 2/9/2022 |       10 | 100000 |
+-------------+---------+-------------+----------+----------+--------+
1 row in set (0.00 sec)
```

Answer 4

Content of .sql file - - >

```
insert into part values (2, "Part_2", "red", 400);
insert into part values (3, "Part_3", "Green", 500);
insert into part values (4, "Part_4", "Blue", 600);
insert into supplier values (2, "Supplier_2", "Mumbai", "SBI");
insert into supplier values (3, "Supplier_3", "Chennai", "HDFC");
insert into shipment values (2, 4, 2, "3/7/2022", 5, 270000.0);
insert into shipment values (3, 2, 1, "4/5/2022", 6, 325000.0);
insert into shipment values (4, 1, 3, "20/9/2021", 15, 401000.0);
insert into shipment values (5, 3, 1, "22/8/2022", 8, 575000.0);
insert into shipment values (6, 4, 2, "12/2/2022", 9, 600000.0);
insert into shipment values (7, 1, 1, "15/7/2022", 1, 70000.0);
insert into shipment values (8, 1, 2, "1/5/2022", 2, 85000.0);
insert into shipment values (9, 2, 3, "25/3/2022", 3, 125000.0);
insert into shipment values (10, 2, 2, "29/5/2022", 4, 235000.0
insert into shipment values (11, 4, 3, "31/3/2022", 5, 433000.0);
insert into shipment values (12, 3, 2, "13/6/2022", 6, 365000.0);
insert into shipment values (13, 2, 1, "23/8/2022", 3, 365000.0);
insert into shipment values (14, 3, 2, "11/2/2022", 7, 365000.0);
insert into shipment values (15, 3, 3, "4/7/2022", 2, 365000.0);
insert into shipment values (16, 4, 3, "17/3/2022", 1, 365000.0);
```



Answer 5

- - > (a).
*select * from part natural join supplier natural join shipment*
where color = “red”;

- - > (b).
select sum(shipment.price), supplier.supplier_no
from part, supplier, shipment
where shipment.supplier_no = supplier.supplier_no
and part.part_no = shipment.part_no
group by supplier.supplier_no order by supplier.supplier_no;

- - > (c).
select supplier.supplier_no, sup_name
from part, supplier, shipment
where shipment.supplier_no = supplier.supplier_no
and part.part_no = shipment.part_no
group by supplier.supplier_no
having count(distinct part.part_no) = (select count(distinct part_no) from part);

```
mysql> select * from part natural join supplier natural join shipment  where color = "red";
+---------+-------------+-----------+-------+--------+-------------+---------+------+-------------+-----------+----------+--------+
| part_no | supplier_no | part_name | color | weight | sup_name    | city    | bank | shipment_no | date      | quantity | price  |
+---------+-------------+-----------+-------+--------+-------------+---------+------+-------------+-----------+----------+--------+
|       1 |           1 | partname1 | red   |    100 | supplier_1  | Mumbai  | BOB  |           1 | 2/9/2022  |       10 | 100000 |
|       1 |           3 | partname1 | red   |    100 | Supplier_3  | Chennai | HDFC |           4 | 20/9/2021 |       15 | 401000 |
|       1 |           1 | partname1 | red   |    100 | supplier_1  | Mumbai  | BOB  |           7 | 15/7/2022 |        1 |  70000 |
|       1 |           2 | partname1 | red   |    100 | Supplier_2  | Mumbai  | SBI  |           8 | 1/5/2022  |        2 |  85000 |
|       2 |           1 | Part_2    | red   |    400 | supplier_1  | Mumbai  | BOB  |           3 | 4/5/2022  |        6 | 325000 |
|       2 |           3 | Part_2    | red   |    400 | Supplier_3  | Chennai | HDFC |           9 | 25/3/2022 |        3 | 125000 |
|       2 |           2 | Part_2    | red   |    400 | Supplier_2  | Mumbai  | SBI  |          10 | 29/5/2022 |        4 | 235000 |
|       2 |           1 | Part_2    | red   |    400 | supplier_1  | Mumbai  | BOB  |          13 | 23/8/2022 |        3 | 365000 |
+---------+-------------+-----------+-------+--------+-------------+---------+------+-------------+-----------+----------+--------+
8 rows in set (0.00 sec)
```

```
mysql> select sum(shipment.price), supplier.supplier_no from part, supplier, shipment where shipment.supplier_no = supplier.supplier_no and part.part_no = shipment.part
_no group by supplier.supplier_no order by supplier.supplier_no;
+---------------------+-------------+
| sum(shipment.price) | supplier_no |
+---------------------+-------------+
|             1435000 |           1 |
|             1920000 |           2 |
|             1689000 |           3 |
+---------------------+-------------+
3 rows in set (0.00 sec)
```

```
mysql> select supplier.supplier_no, sup_name from part, supplier, shipment where shipment.supplier_no = supplier.supplier_no and part.part_no = shipment.part_no group b
y supplier.supplier_no having count(distinct part.part_no) = (select count(distinct part_no) from part);
+-------------+------------+
| supplier_no | sup_name   |
+-------------+------------+
|           2 | Supplier_2 |
|           3 | Supplier_3 |
+-------------+------------+
2 rows in set (0.01 sec)
```