

# Assignment-3

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September 6, 2022

## 1

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

```
mysql> create user 'LAB3'@'localhost' identified by 'Password';
Query OK, 0 rows affected (0.08 sec)
```

```
mysql>
mysql> grant all privileges on lab3.* to 'LAB3'@'localhost';
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> create database lab3
-> use lab3
->
```

## 2

```
CREATE TABLE PART(
part_no VARCHAR(2),
part_name VARCHAR(10),
```

```
color VARCHAR(10),
weight VARCHAR(5),
primary key(part_no)
);
```

```
CREATE TABLE supplier(
supplier_no VARCHAR(2),
sup_name VARCHAR(10),
city VARCHAR(20),
bank VARCHAR(10),
primary key(supplier_no)
);
```

```
CREATE TABLE shipment
shipment_no VARCHAR(2),
part_no VARCHAR(2),
supplier_no VARCHAR(2),
date VARCHAR(12),
quantity VARCHAR(5),
price VARCHAR(7),
primary key(shipment_no),
foreign key(part_no) references part(part_no),
foreign key(supplier_no) references
supplier(supplier_no)
);
```

### 3

```
INSERT INTO part
VALUES(1, "head", "red", 20);
INSERT INTO supplier
VALUES(1, "Shahil", "Vadodara", "BOB");
```

```
INSERT INTO shipment
VALUES(1, 1, 1, "06-09-2022", 10, 100);
```

**Content of 200010039<sub>1</sub>.sqlfile – – i**

```

INSERT INTO part VALUES(2, 'tail', 'blue', 20);
INSERT INTO part VALUES(3, 'tail', 'red', 40);
INSERT INTO part VALUES(4, 'tube', 'orange', 50);
INSERT INTO part VALUES(5, 'wing', 'red', 60);
INSERT INTO part VALUES(6, 'head', 'red', 30);
INSERT INTO part VALUES(7, 'lights', 'yellow', 40);

```

```

INSERT INTO supplier VALUES(2, 'Shivam T', 'Mumbai', 'ICICI');
INSERT INTO supplier VALUES(3, 'Prarthan', 'Manglore', 'Canara');
INSERT INTO supplier VALUES(4, 'Shivam K', 'Patna', 'SBI');
INSERT INTO supplier VALUES(5, 'Virat', 'Delhi', 'BOB');
INSERT INTO supplier VALUES(6, 'Hardik', 'Vadodara', 'SBI');

```

```

INSERT INTO shipment VALUES(2, 1, 1, '07-06-2022', 20, 100);
INSERT INTO shipment VALUES(3, 2, 1, '07-06-2022', 30, 200);
INSERT INTO shipment VALUES(4, 3, 1, '03-06-2022', 40, 150);
INSERT INTO shipment VALUES(5, 4, 1, '01-01-2022', 30, 250);
INSERT INTO shipment VALUES(6, 5, 1, '02-06-2022', 40, 150);
INSERT INTO shipment VALUES(19, 6, 1, '01-01-2022', 30, 200);
INSERT INTO shipment VALUES(7, 7, 1, '04-07-2022', 50, 250);
INSERT INTO shipment VALUES(8, 1, 2, '05-06-2021', 60, 350);
INSERT INTO shipment VALUES(9, 2, 2, '05-06-2021', 70, 500);
INSERT INTO shipment VALUES(10, 4, 2, '06-07-2022', 50, 200);
INSERT INTO shipment VALUES(11, 5, 3, '05-07-2022', 60, 300);
INSERT INTO shipment VALUES(12, 6, 3, '05-02-2021', 30, 100);
INSERT INTO shipment VALUES(13, 6, 4, '05-03-2022', 30, 100);
INSERT INTO shipment VALUES(14, 7, 5, '05-03-2022', 30, 100);
INSERT INTO shipment VALUES(15, 7, 6, '03-05-2022', 40, 200);
INSERT INTO shipment VALUES(16, 5, 5, '04-01-2021', 50, 500);
INSERT INTO shipment VALUES(17, 4, 4, '03-06-2020', 30, 400);
INSERT INTO shipment VALUES(18, 3, 6, '03-06-2020', 15, 200);

```

```
mysql> SELECT * FROM part;
```

part_no	part_name	color	weight
1	head	red	20
2	tail	blue	20
3	tail	red	40
4	tube	orange	50
5	wing	red	60
6	head	red	30
7	lights	yellow	40

```
7 rows in set (0.01 sec)
```

```
mysql> SELECT * FROM supplier;
```

supplier_no	sup_name	city	bank
1	Shahil	Vadodara	BOB
2	Shivam T	Mumbai	ICICI
3	Prarthan	Manglore	Canara
4	Shivam K	Patna	SBI
5	Virat	Delhi	BOB
6	Hardik	Vadodara	SBI

```
6 rows in set (0.00 sec)
```

```
mysql> SELECT * from shipment;
```

shipment_no	part_no	supplier_no	date	quantity	price
1	1	1	06-09-2022	10	100
10	4	2	06-07-2022	50	200
11	5	3	05-07-2022	60	300
12	6	3	05-02-2021	30	100
13	6	4	05-03-2022	30	100
14	7	5	05-03-2022	30	100
15	7	6	03-05-2022	40	200
16	5	5	04-01-2021	50	500
17	4	4	03-06-2020	30	400
18	3	6	03-06-2020	15	200
2	1	1	07-06-2022	20	100
3	2	1	07-06-2022	30	200
4	3	1	03-06-2022	40	150
5	4	1	01-01-2022	30	250
6	5	1	02-06-2022	40	150
7	7	1	04-07-2022	50	250
8	1	2	05-06-2021	60	350
9	2	2	05-06-2021	70	500

```
18 rows in set (0.00 sec)
```

## 5

-- > (a).

```
SELECT DISTINCT supplier.*
FROM (suppliernaturaljoinshipmentnaturaljoinpart)
WHERE part.color = 'red';
```

```
mysql> SELECT distinct supplier.* FROM (supplier natural join s
      -> WHERE part.color = 'red';
```

supplier_no	sup_name	city	bank
1	Shahil	Vadodara	BOB
2	Shivam T	Mumbai	ICICI
6	Hardik	Vadodara	SBI
3	Prarthan	Manglore	Canara
5	Virat	Delhi	BOB
4	Shivam K	Patna	SBI

```
6 rows in set (0.21 sec)
```

-- > (b).

```
SELECT supplier.*, sum(price * quantity) as 'TOTALCOST'
FROM (suppliernaturaljoinshipment)
GROUP BY supplier_no;
```

```
mysql> SELECT supplier.*, sum(price*quantity) as 'TOTAL COST' f
-> GROUP BY supplier_no;
+-----+-----+-----+-----+-----+
| supplier_no | sup_name | city      | bank  | TOTAL COST |
+-----+-----+-----+-----+-----+
| 1           | Shahil   | Vadodara  | BOB   | 41000      |
| 2           | Shivam T | Mumbai    | ICICI | 66000      |
| 3           | Prarthan | Manglore  | Canara | 21000      |
| 4           | Shivam K | Patna     | SBI   | 15000      |
| 5           | Virat    | Delhi     | BOB   | 28000      |
| 6           | Hardik   | Vadodara  | SBI   | 11000      |
+-----+-----+-----+-----+-----+
6 rows in set (0.09 sec)
```

-- > (c).

SELECT supplier<sub>no</sub> FROM shipment

GROUP BY supplier<sub>no</sub>

HAVING COUNT(DISTINCT part<sub>no</sub>) IN (SELECT COUNT(part<sub>no</sub>)

FROM part);

```
mysql> SELECT supplier_no FROM shipment GROUP BY supplier_no HA
+-----+
| supplier_no |
+-----+
| 1           |
+-----+
1 row in set (0.00 sec)
```