

Creating Schema:

Customer:

```
>>>create table customer1(cust_id number(5) primary key, cust_name varchar2(20), phno number(10));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>CUSTOMER1</u>	<u>CUST_ID</u>	Number	-	5	0	1	-	-	-
	<u>CUST_NAME</u>	Varchar2	20	-	-	-	<input type="checkbox"/>	-	-
	<u>PHNO</u>	Number	-	10	0	-	<input type="checkbox"/>	-	-

Truck:

```
>>>create table truck(truck_no number(5) primary key, Driver_name varchar2(20));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>TRUCK</u>	<u>TRUCK_NO</u>	Number	-	5	0	1	-	-	-
	<u>DRIVER_NAME</u>	Varchar2	20	-	-	-	<input type="checkbox"/>	-	-

Shipment:

```
>>>create table shipment(shipment_no number(5), cust_id number(5) references customer1(cust_id), truck_no number(5) references truck(truck_no), weight number(9,2), city_name varchar2(15), ship_date date, fare number(11,2), primary key(shipment_no, cust_id, truck_no));
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>SHIPMENT</u>	<u>SHIPMENT_NO</u>	Number	-	5	0	1	-	-	-
	<u>CUST_ID</u>	Number	-	5	0	2	-	-	-
	<u>TRUCK_NO</u>	Number	-	5	0	3	-	-	-
	<u>WEIGHT</u>	Number	-	9	2	-	<input type="checkbox"/>	-	-
	<u>CITY_NAME</u>	Varchar2	15	-	-	-	<input type="checkbox"/>	-	-
	<u>SHIP_DATE</u>	Date	7	-	-	-	<input type="checkbox"/>	-	-
	<u>FARE</u>	Number	-	11	2	-	<input type="checkbox"/>	-	-

Inserting Data:

Customer:

```
>>>insert into customer1 values(1, 'Tarun', 7980998132);
>>>insert into customer1 values(2, 'Barun', 8980998132);
>>>insert into customer1 values(3, 'Varun', 6980998132);
```

CUST_ID	CUST_NAME	PHNO
1	Tarun	7980998132
2	Barun	8980998132
3	Varun	6980998132

Truck:

```
>>>insert into truck values(101, 'Aman');
>>>insert into truck values(102, 'Raju');
```

TRUCK_NO	DRIVER_NAME
101	Aman
102	Raju

Shipment:

```
>>>insert into shipment values(1, 1, 102, 400.00, 'Kolkata','5-dec-2022', 5000.00);
>>>insert into shipment values(2, 1, 101, 500.00, 'Mumbai','5-jul-2015', 10000.00);
>>>insert into shipment values(3, 2, 102, 800.00, 'Mumbai','5-jul-2022', 13000.00);
>>>insert into shipment values(4, 3, 101, 600.00, 'Kolkata','5-dec-2022', 5000.00);
>>>insert into shipment values(5, 3, 101, 600.00, 'Delhi','5-jul-2015', 13000.00);
>>>insert into shipment values(6, 3, 101, 600.00, 'Kolkata','9-jun-2020', 7000.00);
```

SHIPMENT_NO	CUST_ID	TRUCK_NO	WEIGHT	CITY_NAME	SHIP_DATE	FARE
1	1	102	400	Kolkata	05-DEC-22	5000
2	1	101	500	Mumbai	05-JUL-15	10000
3	2	102	800	Mumbai	05-JUL-22	13000
4	3	101	600	Kolkata	05-DEC-22	5000
5	3	101	600	Delhi	05-JUL-15	13000
6	3	101	600	Kolkata	09-JUN-20	7000

Queries:

1) List cities that have received shipments from 'Tarun'.

```
>>>select city_name from shipment where cust_id = (select cust_id from customer1 where cust_name = 'Tarun');
```

CITY_NAME
Kolkata
Mumbai

2) List customers who have sent a shipment to Mumbai.

```
>>>select * from customer1 where cust_id in (select cust_id from shipment where city_name = 'Mumbai');
```

CUST_ID	CUST_NAME	PHNO
1	Tarun	7980998132
2	Barun	8980998132

3) Find the driver name who has a shipment on 5th July 2015.

```
>>>select driver_name from truck where truck_no in (select truck_no from shipment where ship_date = '5-jul-2015');
```

DRIVER_NAME
Aman

4) Find the minimum and maximum weighted shipment with truck number.

```
>>>select truck_no, weight from shipment where weight = (select max(weight) from shipment)
union select truck_no, weight from shipment where weight = (select min(weight) from shipment);
```

TRUCK_NO	WEIGHT
102	400
102	800

5) Find the average fare for shipment to 'Kolkata' for each distinct shipment weight.

```
>>>select avg(fare) from shipment where city_name='Kolkata' group by weight;
```

AVG(FARE)	WEIGHT
5000	400
6000	600