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Week 6

- 1) select train_no,avg(distance) from route_info group by train_no;

```
MariaDB [cs621_railway]> select train_no,avg(distance) from route_info group by train_no;
```

train_no	avg(distance)
25260	277.1667
25261	277.1667
58450	280.3333
58451	279.8333
62620	184.4000
62621	185.0000

```
6 rows in set (0.000 sec)
```

- 2) select train_no,avg(distance) from route_info group by train_no order by distance desc;

```
MariaDB [cs621_railway]> select train_no,avg(distance) from route_info group by train_no order by distance desc;
```

train_no	avg(distance)
58450	280.3333
58451	279.8333
25260	277.1667
25261	277.1667
62620	184.4000
62621	185.0000

```
6 rows in set (0.000 sec)
```

- 3) select train_no, sum(distance) from route_info group by train_no order by distance desc;

```
MariaDB [cs621_railway]> select train_no,avg(distance) from route_info group by train_no order by distance desc;
```

train_no	avg(distance)
58450	280.3333
58451	279.8333
25260	277.1667
25261	277.1667
62620	184.4000
62621	185.0000

```
6 rows in set (0.000 sec)
```

- 4) create view count_train as select train_number, count(compartment_no) as numofcompartments from compartment group by train_number;

```

select train_name, numofcompartments from count_train inner join train on
count_train.train_number=train.train_no where numofcompartments in ((select
max(n
umofcompartments) from count_train),(select min(numofcompartments) from
count_train));
drop view count_train;

```

```

MariaDB [cs621_railway]> create view count_train as select train_number, count(compartment
_no) as numofcompartments from compartment group by train_number;
Query OK, 0 rows affected (0.002 sec)

MariaDB [cs621_railway]> select train_name, numofcompartments from count_train inner join
train on count_train.train_number=train.train_no where numofcompartments in ((select max(n
umofcompartments) from count_train),(select min(numofcompartments) from count_train));
+-----+-----+
| train_name | numofcompartments |
+-----+-----+
| BEN-MAN Express | 2 |
| CHE-BEN Shatabdi | 2 |
| BEN-CHE Shatabdi | 5 |
+-----+-----+
3 rows in set (0.002 sec)

MariaDB [cs621_railway]> drop view count_train;
Query OK, 0 rows affected (0.000 sec)

```

- 5) select user_id, count(phone_no) from (select * from user_phone where user_id in ("ADM_001", "USR_006", "USR_010")) as count_phone group by user_id;

```

MariaDB [cs621_railway]> select user_id, count(phone_no) from (select * from user_phone wh
ere user_id in ("ADM_001", "USR_006", "USR_010")) as count_phone group by user_id;
+-----+-----+
| user_id | count(phone_no) |
+-----+-----+
| ADM_001 | 2 |
| USR_006 | 2 |
| USR_010 | 2 |
+-----+-----+
3 rows in set (0.006 sec)

```

- 6) SELECT train_type, AVG(fare_per_km) FROM fare GROUP BY train_type ORDER BY AVG(fare_per_km) DESC;

```

MariaDB [cs621_railway]> SELECT train_type, AVG(fare_per_km) FROM fare GROUP BY train_type ORDER BY AVG(fare_per_km) DES
C;
+-----+-----+
| train_type | AVG(fare_per_km) |
+-----+-----+
| Fast | 2.0000 |
| Superfast | 2.0000 |
| Mail | 1.3333 |
+-----+-----+
3 rows in set (0.014 sec)

```

- 7) **select * from ticket_passenger where age in (select max(age) from ticket_passenger);**

```
MariaDB [cs621_railway]> select * from ticket_passenger where age in (select max(age) from
ticket_passenger);
+-----+-----+-----+-----+
| seat_no | name   | age  | pnr   |
+-----+-----+-----+-----+
| F01-13  | Ramya R | 45   | PNR012 |
+-----+-----+-----+-----+
1 row in set (0.001 sec)
```

- 8) **select count(*) from ticket_passenger where name like "%Ullal%";**

```
MariaDB [cs621_railway]> select count(*) from ticket_passenger where name like "%Ullal%";
+-----+
| count(*) |
+-----+
|         4 |
+-----+
1 row in set (0.043 sec)
```