

DBMS

Lab 7

Hita Juneja

PES1UG20CS645

K Section

Roll No. 27

1. Find the list of passengers (user_id, user_type First name and last name) who have traveled from Bengaluru to Chennai during the month of Oct 2021 and Aug 2022

Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and (travel_date like '2021-10-%')

UNION

Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and (travel_date like '2022-08-%');

```
MariaDB [pes1ug20cs645_railway]> Select user_id, user_type, firstname, lastname from ticket, train_u
ser where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' a
nd (travel_date like '2021-10-%' )
-> UNION
-> Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger
_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and (travel_date like '2022
-08-%' );
+-----+-----+-----+-----+
| user_id | user_type | firstname | lastname |
+-----+-----+-----+-----+
| USR_008 | PSGR      | Ajit      | Sethi     |
| ADM_001 | ADMIN     | Narendra  | Modi      |
+-----+-----+-----+-----+
2 rows in set (0.006 sec)
```

2. Find the list of passengers (user_id, user_type First name and last name) who have traveled from Bengaluru to Chennai during the month of Oct 2021 and also during Aug 2022

Select user_id, user_type, firstname, lastname from ticket, train_user where
 ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
 and (travel_date like '2021-10-%')

INTERSECT

Select user_id, user_type, firstname, lastname from ticket, train_user where
 ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
 and (travel_date like '2022-08-%');

```
MariaDB [pes1ug20cs645_railway]> Select user_id, user_type, firstname, lastname from ticket, train_u
ser where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' a
nd (travel_date like '2021-10-%')
-> INTERSECT
[ -> Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger]
_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and (travel_date like '2022
-08-%');
Empty set (0.003 sec)
```

3. Find the list of passengers (user_id, user_type First name and last name) who have traveled from Bengaluru to Chennai during the month of Aug 2022 and not in Oct 2021

Select user_id, user_type, firstname, lastname from ticket, train_user where
 ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
 and (travel_date like '2022-08-%')

EXCEPT

Select user_id, user_type, firstname, lastname from ticket, train_user where
 ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
 and (travel_date like '2021-10-%');

```
MariaDB [pes1ug20cs645_railway]> Select user_id, user_type, firstname, lastname from ticket, train_u
ser where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' a
nd (travel_date like '2022-08-%')
-> EXCEPT
[ -> Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger]
_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and (travel_date like '2021
-10-%');
+-----+-----+-----+-----+
| user_id | user_type | firstname | lastname |
+-----+-----+-----+-----+
| ADM_001 | ADMIN    | Narendra  | Modi     |
+-----+-----+-----+-----+
1 row in set (0.004 sec)
```

4. Find the list of passengers (user_id, user_type, First name and last name) who have traveled from Bengaluru to Chennai and returned to Bengaluru within a week.

```
MariaDB [pes1ug20cs645_railway]> Select user_id, user_type, firstname, lastname from ticket as t1, train_user as t2 where t1.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai' and t1.travel_date=t2.travel_date and t1.user_id IN (select user_id from train_user, ticket as t2 where t2.passenger_id = train_user.user_id and arrival='Bengaluru' and t2.travel_date-t1.travel_date <=7);
```

user_id	user_type	firstname	lastname
ADM_001	ADMIN	Narendra	Modi

```
1 row in set (0.010 sec)
```

```
Select user_id, user_type, firstname, lastname from ticket, train_user where
ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
EXCEPT
```

```
MariaDB [peslug20cs645-railway]> Select user_id, user_type, firstname, lastname from ticket, train_user
r where ticket.passenger_id = train_user.user_id and departure='Bengaluru' and arrival='Chennai'
-> EXCEPT
-> Select user_id, user_type, firstname, lastname from ticket, train_user where ticket.passenger_id
d = train_user.user_id and arrival='Bengaluru'; OPERATOR
+-----+-----+-----+-----+ (s) FROM table_name [WHERE]
| user_id | user_type | firstname | lastname |
+-----+-----+-----+-----+
| USR_008 | PSGR      | Ajit      | Sethi    |
+-----+-----+-----+-----+
1 row in set (0.006 sec)
```