

DBMS Lab 4

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PES1UG20CS084

Task 1

1. Inserting shared data into tables:

```
MariaDB [peslug20cs084_railway_lab4]> load data infile "Compartment.csv"
-> into table compartment
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 20 rows affected, 19 warnings (0.063 sec)
```

```
MariaDB [peslug20cs084_railway_lab4]> load data infile "FareTable.csv"
-> into table fare
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 9 rows affected, 8 warnings (0.020 sec)
```

```
MariaDB [peslug20cs084_railway_lab4]> load data infile "Payment-Info.csv"
-> into table payment_info
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 15 rows affected (0.023 sec)
```

```
MariaDB [peslug20cs084_railway_lab4]> load data infile "RouteInfo.csv"
-> into table route_info
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 44 rows affected, 43 warnings (0.031 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "Ticket.csv"
-> into table ticket
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 13 rows affected (0.030 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "Ticket-Passenger.csv"
-> into table ticket_passenger
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 24 rows affected (0.062 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "Train.csv"
-> into table train
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 6 rows affected (0.022 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "Train_User.csv"
-> into table train_user
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 1 row affected, 1 warning (0.023 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "User-Phone.csv"
-> into table user_phone
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 66 rows affected (0.030 sec)
```

```
MariaDB [pes1ug20cs084_railway_lab4]> load data infile "Train_User.csv"
-> into table user_train
-> columns terminated by ','
-> optionally enclosed by '"'
-> escaped by '\\'
-> lines terminated by '\n'
-> ignore 1 lines;
Query OK, 33 rows affected, 98 warnings (0.067 sec)
```

2. Calculate and update age attribute in User Table

```
update train_user set age=timestampdiff(year,dob,curdate());
```

```
MariaDB [lab4_peslug20cs084]> select * from train_user;
```

user_id	user_type	firstname	lastname	age	dob	pincode	street_number
ADM_001	ADMIN	Narendra	Modi	33	1989-04-14	600047	Old Jail Road
ADM_002	ADMIN	Droupadi	Murmu	32	1990-04-14	640012	High Street
ADM_003	ADMIN	Manmohan	Singh	31	1991-04-08	575003	Pumpwell Road
USR_001	PSGR	Ajit	Ullal	51	1971-01-01	560001	10, Janpath
USR_002	PSGR	Muhammed	Ali	21	2000-10-09	560003	10, Downing
USR_003	PSGR	Sai Deepak	Reddy	25	1996-12-12	600001	14, Kailsh Marg
USR_004	PSGR	Rudra	Agarwal	25	1996-12-13	600042	5, Lohia Garden
USR_005	PSGR	Rahul	Khanna	24	1997-12-14	600067	1, Pink Street
USR_006	PSGR	Nirmala	Seturaman	23	1998-12-15	560105	3, Blue Avenue
USR_007	PSGR	Smriti	Irani	22	1999-12-16	575014	4, Banyan Avenue
USR_008	PSGR	Ajit	Sethi	56	1966-04-14	575001	6, Poes Garden
USR_009	PSGR	Arjun	Allu	55	1967-04-08	575020	7, Dhamaka street
USR_010	PSGR	Samanta	Prabhu	54	1968-04-14	600042	8, Clone Colony
USR_011	PSGR	Kiran	Bedi	53	1969-04-14	560003	56, Brigade Road
USR_012	PSGR	Rahul	Gandhi	52	1970-04-08	475001	Mirza road
USR_013	PSGR	Rashkit	Shetty	51	1971-04-14	560009	JC Road
USR_014	PSGR	Rishi	Sunak	50	1972-04-14	600034	Anna Sali
USR_015	PSGR	Vedavalli	Srinath	49	1973-04-14	560054	Church Street, Bangalore
USR_016	PSGR	Subbu	Saravana	48	1974-04-14	600043	American Street
USR_017	PSGR	Sheela	Dixit	47	1975-04-08	560048	Kasturba Road
USR_018	PSGR	Margaret	Alva	46	1976-04-14	560008	New BEL Road
USR_019	PSGR	Arun	Kumar	45	1977-04-14	600046	Mint Street
USR_020	PSGR	Anshu	Bhardwaj	44	1978-04-14	575001	KSR Road
USR_021	PSGR	Suma	Sampat	43	1979-04-08	560012	Old Airport Road, Bangalore
USR_022	PSGR	Srihari	Udupa	42	1980-04-14	560015	Suranjan Das Road
USR_023	PSGR	Satish	Kotian	41	1981-04-14	600044	T Nagar
USR_024	PSGR	Shradha	Nayar	40	1982-04-08	560006	M G Road, Bangalore
USR_025	PSGR	Manisha	Solanki	39	1983-04-08	575030	M G Road
USR_026	PSGR	Bharti	Devgan	38	1984-04-14	560059	NAL Wind Tunnel Road
USR_027	PSGR	Roopa	Ram	37	1985-04-14	575023	Bunder Road
USR_028	PSGR	Pallavi	Ram	36	1986-04-08	560044	Lavelle Road
USR_029	PSGR	Ravi	Naik	35	1987-04-14	600045	Thiru V ka Salai
USR_030	PSGR	Virat	Murthy	34	1988-04-14	575011	Bejai New Road

3. Display all the route information whose distance falls in a range from 70 to 150 km.

```
select * from route_info where distance between 70 and 150;
```

```
MariaDB [lab4_peslug20cs084]> select * from route_info where distance between 70 and 150;
```

from_station_no	to_station_no	from_station_name	to_station_name	distance	train_no
1	2	Mangaluru	Kannur	131	2526
4	4	Palakkad	Chennai	130	2526
1	2	Chennai	Palakkad	130	2526
3	4	Kannur	Mangaluru	131	2526
3	4	Mysore	Bengaluru	139	5845
1	2	Bengaluru	Mysore	139	5845
1	2	Chennai	Sholingur	90	6262
1	3	Chennai	Katpadi	129	6262
4	5	Bangarpet	Bengaluru	71	6262
1	2	Bengaluru	Bangarpet	71	6262
3	5	Katpadi	Chennai	130	6262
4	5	Sholingur	Chennai	90	6262

4. Display the train route information which are run between Chennai and Sholingur


```
select * from route_info where from_station_name="Chennai" and
to_station_name="Sholingur";
```

```
MariaDB [lab4_peslug20cs084]> select * from route_info where from_station_name="Chennai" and to_station_name="Sholingur";
+-----+-----+-----+-----+-----+-----+
| from_station_no | to_station_no | from_station_name | to_station_name | distance | train_no |
+-----+-----+-----+-----+-----+-----+
| 1 | 2 | Chennai | Sholingur | 90 | 62620 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.009 sec)
```

5. Display the train details whose type is not mail

```
select * from train where train_type != "Mail";
```

```
MariaDB [lab4_peslug20cs084]> select * from train where train_type != "Mail";
+-----+-----+-----+-----+-----+-----+
| train_no | train_name | train_type | source | destination | availability |
+-----+-----+-----+-----+-----+-----+
| 58450 | MAN-BEN Express | Fast | Mangaluru | Bengaluru | yes |
| 58451 | BEN-MAN Express | Fast | Bengaluru | Mangaluru | yes |
| 62620 | CHE-BEN Shatabdi | Superfast | Chennai | Bengaluru | No |
| 62621 | BEN-CHE Shatabdi | Superfast | Bengaluru | Chennai | yes |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.001 sec)
```

6. Display the train name which goes to Chennai from Bangalore

```
select train_name from train where source="Bengaluru" and
destination="Chennai";
```

```
MariaDB [lab4_peslug20cs084]> select train_name from train where source="Bengaluru" and destination="Chennai";
+-----+
| train_name |
+-----+
| BEN-CHE Shatabdi |
+-----+
1 row in set (0.001 sec)
```

7. Display the list of trains starting from Chennai after 8:00

```
select * from ticket where departure="Chennai" and
departure_time>cast('8:00:00' as time);
```

```
MariaDB [lab4_peslug20cs084]> select * from ticket where departure="Chennai" and departure_time>cast('8:00:00' as time);
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| pnr | train_no | travel_date | departure | arrival | departure_time | arrival_time | passenger_id | train_type | compartment_type | compartment_no |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| PHR003 | 25261 | 2022-08-01 | Chennai | Mangaluru | 18:00:00 | 07:30:00 | ADM_003 | Mail | III Class | 002 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.010 sec)
```

8. Display the list of users who are born between 1980 to 1990

```
select * from train_user where dob between '1980-01-01' and '1990-12-31';
```

```
MariaDB [lab4_peslug20cs084]> select * from train_user where dob between '1980-01-01' and '1990-12-31';
+-----+-----+-----+-----+-----+-----+-----+-----+
| user_id | user_type | firstname | lastname | age | dob | pincode | street_number |
+-----+-----+-----+-----+-----+-----+-----+-----+
| ADM_001 | ADMIN | Narendra | Modi | 33 | 1989-04-14 | 600047 | Old Jail Road |
| ADM_002 | ADMIN | Droupadi | Murmu | 32 | 1990-04-14 | 640012 | High Street |
| USR_022 | PSGR | Srihari | Udupa | 42 | 1980-04-14 | 560015 | Suranjan Das Road |
| USR_023 | PSGR | Satish | Kotian | 41 | 1981-04-14 | 600044 | T Nagar |
| USR_024 | PSGR | Shradha | Nayar | 40 | 1982-04-08 | 560006 | M G Road, Bangalore |
| USR_025 | PSGR | Manisha | Solanki | 39 | 1983-04-08 | 575030 | M G Road |
| USR_026 | PSGR | Bharti | Devgan | 38 | 1984-04-14 | 560059 | NAL Wind Tunnel Road |
| USR_027 | PSGR | Roopa | Ram | 37 | 1985-04-14 | 575023 | Bunder Road |
| USR_028 | PSGR | Pallavi | Ram | 36 | 1986-04-08 | 560044 | Lavelle Road |
| USR_029 | PSGR | Ravi | Naik | 35 | 1987-04-14 | 600045 | Thiru V ka Salai |
| USR_030 | PSGR | Virat | Murthy | 34 | 1988-04-14 | 575011 | Bejai New Road |
+-----+-----+-----+-----+-----+-----+-----+-----+
11 rows in set (0.000 sec)
```

9. Display the train users whose name starts with the letter 'S'

```
select * from train_user where firstname like "S%";
```

```
MariaDB [lab4_peslug20cs084]> select * from train_user where firstname like "S%";
```

user_id	user_type	firstname	lastname	age	dob	pincode	street_number
USR_003	PSGR	Sai Deepak	Reddy	25	1996-12-12	600001	14, Kailsh Marg
USR_007	PSGR	Smriti	Irani	22	1999-12-16	575014	4, Banyan Avenue
USR_010	PSGR	Samanta	Prabhu	54	1968-04-14	600042	8, Clone Colony
USR_016	PSGR	Subbu	Saravana	48	1974-04-14	600043	American Street
USR_017	PSGR	Sheela	Dixit	47	1975-04-08	560048	Kasturba Road
USR_021	PSGR	Suma	Sampat	43	1979-04-08	560012	Old Airport Road, Bangalore
USR_022	PSGR	Srihari	Udupa	42	1980-04-14	560015	Suranjan Das Road
USR_023	PSGR	Satish	Kotian	41	1981-04-14	600044	T Nagar
USR_024	PSGR	Shradha	Nayar	40	1982-04-08	560006	M G Road, Bangalore

```
9 rows in set (0.001 sec)
```

10. Find the availability of I Class compartment of the train number 62621

```
select availability from compartment where compartment_type="I Class" and train_number=62621;
```

```
MariaDB [lab4_peslug20cs084]> select availability from compartment where compartment_type="I Class" and train_number=62621;
```

availability
6

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

11. Find the PNR and Transaction ID of the users who made payment via Union Bank

```
select pnr, transaction_no from payment_info where bank="Union Bank";
```

```
MariaDB [lab4_peslug20cs084]> select pnr, transaction_no from payment_info where bank="Union Bank";
```

pnr	transaction_no
PNR012	243535
PNR015	758900
PNR010	867546
PNR003	978776

```
4 rows in set (0.007 sec)
```