

DATABASE MANAGEMENT SYSTEMS LAB

Week 3

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Section H

Roll No 40

COMMANDS USED: SHOW DATABASES, USE RAILWAY_RESERVATION_SYSTEM, SHOW TABLES

```
(base) vanshikagoel@Vanshikas-MacBook-Air ~ % /Applications/xampp/xamppfiles/bin/mysql -uroot -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 23
Server version: 10.4.21-MariaDB Source distribution

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| e_bike   |
| information_schema |
| mysql    |
| performance_schema |
| phpmyadmin |
| railway_reservation_system |
| test     |
+-----+
7 rows in set (0.002 sec)

MariaDB [(none)]> use railway_reservation_system;
Database changed
MariaDB [railway_reservation_system]> show tables;
Empty set (0.001 sec)
```

TRAIN

```
MariaDB [railway_reservation_system]> create table TRAIN_484(Train_no int NOT NULL, Train_type varchar(255), Train_name varchar(255), Source varchar(255), Destination varchar(255), Availability boolean, Primary key(Train_no));
Query OK, 0 rows affected (0.071 sec)
```

COMPARTMENT

```
MariaDB [railway_reservation_system]> create table COMPARTMENT_484(Compartment_number int NOT NULL, Compartment_type varchar(255), Compartment_capacity int NOT NULL, Compartment_availability boolean, Train_no int NOT NULL, constraint my_compartment Primary key(Compartment_number), Foreign key(Train_no) references TRAIN_484(Train_no));
Query OK, 0 rows affected, 1 warning (0.033 sec)
```

ROUTE INFO

```
MariaDB [railway_reservation_system]> create table ROUTE_INFO484(From_station_no int NOT NULL, From_station_name varchar(255), To_station_no int NOT NULL, To_station_name varchar(255), Distance int NOT NULL, Train_no int NOT NULL, constraint my_routeinfo Primary key(From_station_no, To_station_no, Train_no), Foreign key(Train_no) references TRAIN_484(Train_no));
Query OK, 0 rows affected, 1 warning (0.033 sec)
```

USER

```
MariaDB [railway_reservation_system]> create table USER_484(User_id int NOT NULL, User_type varchar(50), Fname varchar(50), Lname varchar(50), Age int, Date_of_birth date, Pincode int, Street_no int, Primary key(User_id));
Query OK, 0 rows affected (0.033 sec)
```

USER - TRAIN

```
MariaDB [railway_reservation_system]> create table USER_TRAIN_484(Train_no int NOT NULL, User_id int NOT NULL, Date_time_stamp timestamp, constraint my_user_train Primary key(Train_no, User_id, Date_time_stamp), Foreign key(Train_no) references TRAIN_484(Train_no), Foreign key(User_id) references USER_484(User_id));
Query OK, 0 rows affected, 1 warning (0.034 sec)
```

USER - PHONE

```
MariaDB [railway_reservation_system]> create table USER_PHONE_484(User_id int NOT NULL, Phone_no int NOT NULL, constraint my_user_phone Primary key(User_id, Phone_no), Foreign key(User_id) references USER_484(User_id));
Query OK, 0 rows affected, 1 warning (0.030 sec)
```

TICKET

```
MariaDB [railway_reservation_system]> create table TICKET_484(Pnr int NOT NULL, Train_no int NOT NULL, Travel_date date, Departure varchar(50), Arrival varchar(50), Departure_time timestamp, Arrival_time timestamp, User_id int NOT NULL, Train_type varchar(255), Compartment_type varchar(255), Compartment_number int NOT NULL, Primary key(Pnr), Foreign key(User_id) references USER_484(User_id));
Query OK, 0 rows affected (0.027 sec)
```

PAYMENT INFO

```
MariaDB [railway_reservation_system]> create table PAYMENT_INFO_484(Transaction_id int NOT NULL, Bank varchar(255), Card_number int NOT NULL, Price float, Pnr int NOT NULL, Primary key(Transaction_id), Foreign key(Pnr) references TICKET_484(Pnr));
Query OK, 0 rows affected (0.010 sec)
```

TICKET - PASSENGER

```
MariaDB [railway_reservation_system]> create table TICKET_PASSENGER_484(Seat_no int NOT NULL, Name varchar(255), Age int, Pnr int NOT NULL, Primary key(Seat_no), Foreign key(Pnr) references TICKET_484(Pnr));
Query OK, 0 rows affected (0.027 sec)
```

FARE TABLE

```
MariaDB [railway_reservation_system]> create table FARE_TABLE_484(Train_type varchar(255), Compartment_type varchar(255), Far_per_km float, constraint my_fare_table Primary key(Train_type, Compartment_type));
Query OK, 0 rows affected, 1 warning (0.027 sec)
```

COMMANDS USED: ALTER MODIFY, ALTER RENAME, ALTER SET DEFAULT

```
MariaDB [railway_reservation_system]> alter table PAYMENT_INFO_484 modify column Card_number int unique NOT NULL;
Query OK, 0 rows affected (0.032 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [railway_reservation_system]> desc PAYMENT_INFO_484;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Transaction_id | int(11) | NO | PRI | NULL | |
| Bank | varchar(255) | YES | | NULL | |
| Card_number | int(11) | NO | UNI | NULL | |
| Price | float | YES | | NULL | |
| Pnr | int(11) | NO | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.005 sec)
```

```
MariaDB [railway_reservation_system]> alter table TICKET_484 rename TICKET_TABLE_484;
Query OK, 0 rows affected (0.009 sec)
```

```
MariaDB [railway_reservation_system]> show tables;
+-----+
| Tables_in_railway_reservation_system |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO484 |
| TICKET_PASSENGER_484 |
| TICKET_TABLE_484 |
| TRAIN_484 |
| USER_484 |
| USER_PHONE_484 |
| USER_TRAIN_484 |
+-----+
10 rows in set (0.004 sec)
```

```
MariaDB [railway_reservation_system]> alter table COMPARTMENT_484 alter Compartment_availability set default 1;
Query OK, 0 rows affected (0.034 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [railway_reservation_system]> desc COMPARTMENT_484;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Compartment_number | int(11) | NO | PRI | NULL | |
| Compartment_type | varchar(255) | YES | | NULL | |
| Compartment_capacity | int(11) | NO | | NULL | |
| Compartment_availability | tinyint(1) | YES | | 1 | |
| Train_no | int(11) | NO | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.016 sec)
```

COMMANDS USED: TRUNCATE TABLE, DROP TABLE

```
MariaDB [railway_reservation_system]> truncate table USER_PHONE_484;
Query OK, 0 rows affected (0.000 sec)
```

```
MariaDB [railway_reservation_system]> desc USER_PHONE_484;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| User_id | int(11) | NO | PRI | NULL | |
| Phone_no | int(11) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.005 sec)
```

```
MariaDB [railway_reservation_system]> drop table USER_PHONE_484;
Query OK, 0 rows affected (0.006 sec)
```

```
MariaDB [railway_reservation_system]> desc USER_PHONE_484;
ERROR 1146 (42S02): Table 'railway_reservation_system.user_phone_484' doesn't exist
MariaDB [railway_reservation_system]> show tables;
```

```
+-----+
| Tables_in_railway_reservation_system |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO484 |
| TICKET_PASSENGER_484 |
| TICKET_TABLE_484 |
| TRAIN_484 |
| USER_484 |
| USER_TRAIN_484 |
+-----+
9 rows in set (0.001 sec)
```