

DATABASE MANAGEMENT SYSTEMS LAB

Week 3

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COMMANDS USED: SHOW DATABASES, USE RAILWAY_RESERVATION_SYSTEM, SHOW TABLES

```
MariaDB [(none)]> create database PES1UG20CS484_RAILWAY_RESERVATION;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> USE PES1UG20CS484_RAILWAY_RESERVATION;
Database changed
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> show tables;
Empty set (0.001 sec)
```

TRAIN

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.033 sec)
```

COMPARTMENT

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.035 sec)
```

ROUTE INFO

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.027 sec)
```

USER

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.031 sec)
```

USER - TRAIN

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.029 sec)
```

USER - PHONE

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.027 sec)
```

TICKET

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.029 sec)
```

PAYMENT INFO

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.027 sec)
```

TICKET - PASSENGER

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> 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 (0.028 sec)
```

FARE TABLE

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> create table FARE_TABLE_484(Train_type varchar(255), Compartment_type varchar(255), Fares_per_km float, constraint my_fare_table Primary key(Train_type, Compartment_type));
Query OK, 0 rows affected, 1 warning (0.024 sec)
```

ALTER MODIFY, ALTER SET DEFAULT, ALTER ADD UNIQUE, ALTER ADD CHECK, ALTER RENAME

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table TRAIN_484 modify column Train_type varchar(255) NOT NULL;
Query OK, 0 rows affected (0.047 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table TRAIN_484 modify column Train_name varchar(255) NOT NULL;
Query OK, 0 rows affected (0.033 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table TRAIN_484 alter Availability set default '1';
Query OK, 0 rows affected (0.028 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table TRAIN_484 add unique(Train_name);
Query OK, 0 rows affected (0.031 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table USER_484 add check (Age>5);
Query OK, 0 rows affected (0.063 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> show tables;
+-----+
| Tables_in_PES1UG20CS484_RAILWAY_RESERVATION |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO484 |
| TICKET_484 |
| TICKET_PASSENGER_484 |
| TRAIN_484 |
| USER_484 |
| USER_PHONE_484 |
| USER_TRAIN_484 |
+-----+
10 rows in set (0.001 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> alter table ROUTE_INFO484 rename ROUTE_INFO_484;
Query OK, 0 rows affected (0.006 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> show tables;
+-----+
| Tables_in_PES1UG20CS484_RAILWAY_RESERVATION |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO_484 |
| TICKET_484 |
| TICKET_PASSENGER_484 |
| TRAIN_484 |
| USER_484 |
| USER_PHONE_484 |
| USER_TRAIN_484 |
+-----+
10 rows in set (0.001 sec)
```

COMMANDS USED: TRUNCATE TABLE, DROP TABLE

```
MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> truncate USER_PHONE_484;
Query OK, 0 rows affected (0.012 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> show tables;
+-----+
| Tables_in_PES1UG20CS484_RAILWAY_RESERVATION |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO_484 |
| TICKET_484 |
| TICKET_PASSENGER_484 |
| TRAIN_484 |
| USER_484 |
| USER_PHONE_484 |
| USER_TRAIN_484 |
+-----+
10 rows in set (0.001 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> drop table USER_PHONE_484;
Query OK, 0 rows affected (0.007 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> show tables;
+-----+
| Tables_in_PES1UG20CS484_RAILWAY_RESERVATION |
+-----+
| COMPARTMENT_484 |
| FARE_TABLE_484 |
| PAYMENT_INFO_484 |
| ROUTE_INFO_484 |
| TICKET_484 |
| TICKET_PASSENGER_484 |
| TRAIN_484 |
| USER_484 |
| USER_TRAIN_484 |
+-----+
9 rows in set (0.001 sec)

MariaDB [PES1UG20CS484_RAILWAY_RESERVATION]> █
```

All the commands used are also saved in the Commands Used.sql file.