UE20CS301 DBMS LAB

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LAB 3 DDL COMMANDS

**Create tables for the Above-mentioned Relational design and add check, default, not null and unique constraints.**

**1)Specify PK and FK constraints for all applicable Relations**

**2)For Train\_name, Train\_Type in Train table add not null constraints**

**value**

**3) Add default constraint for compartment table setting Availability attribute to Yes**

**4)train name should be unique**

**5)Add check constraints to Ticket to check if the passenger age is above 5**

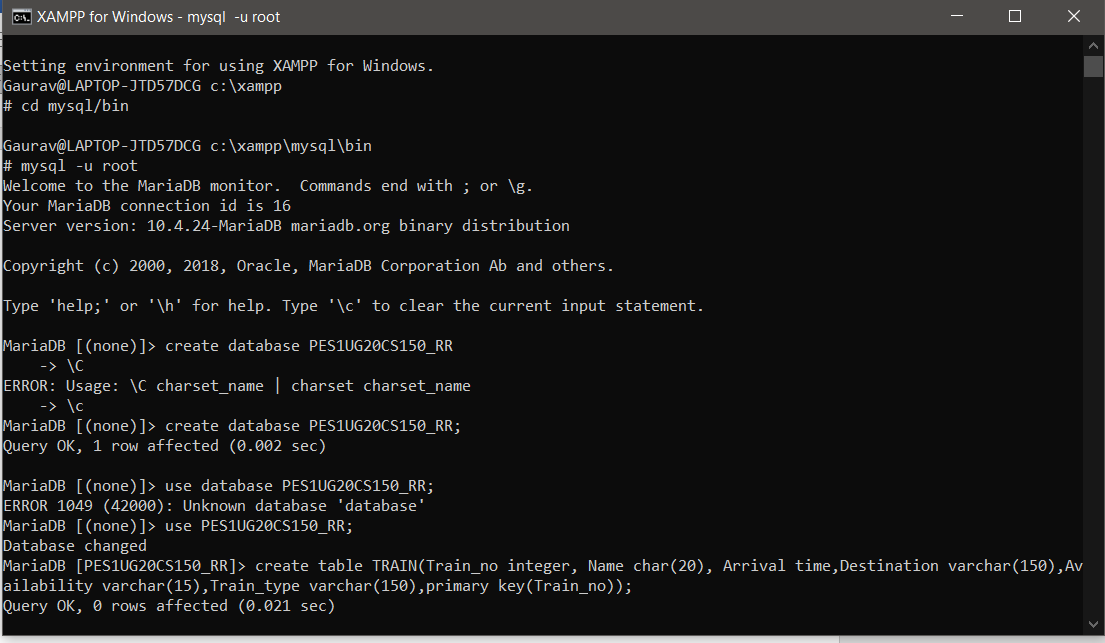
**6)Rename any existing table name**

**7) use Truncate and drop commands**

CREATING THE DATABASE

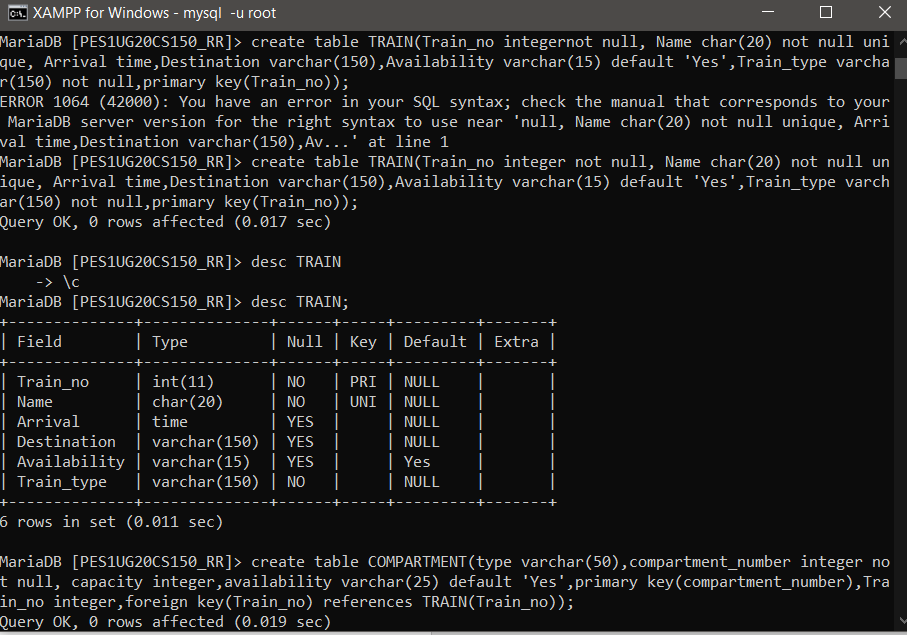
create database PES1UG20CS150\_RR;

use PES1UG20CS150\_RR;



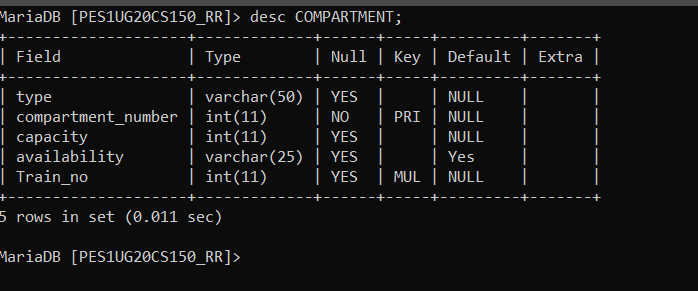
create table TRAIN(Train\_no integer not null, Name char(20) not null unique, Arrival time,Destination varchar(150),Availability varchar(15) default 'Yes',Train\_type varchar(150) not null,primary key(Train\_no));

desc TRAIN;



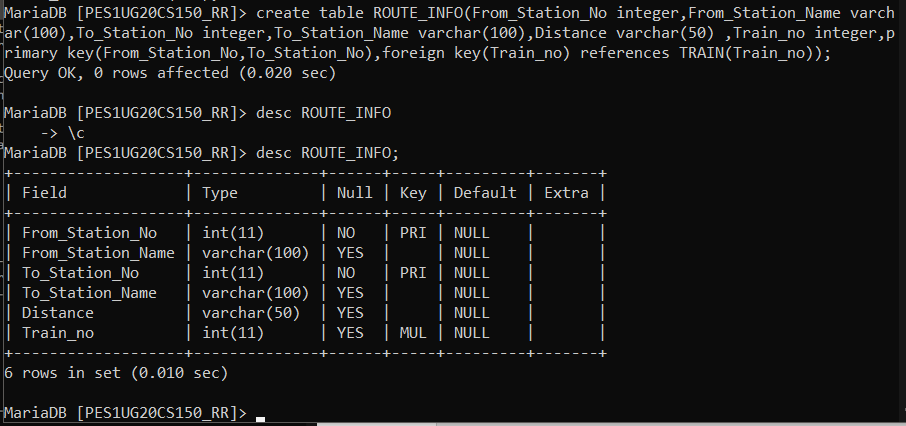
MariaDB [PES1UG20CS150\_RR]> create table COMPARTMENT(type varchar(50),compartment\_number integer not null, capacity integer,availability varchar(25) default 'Yes',primary key(compartment\_number),Train\_no integer,foreign key(Train\_no) references TRAIN(Train\_no));

desc COMPARTMENT;



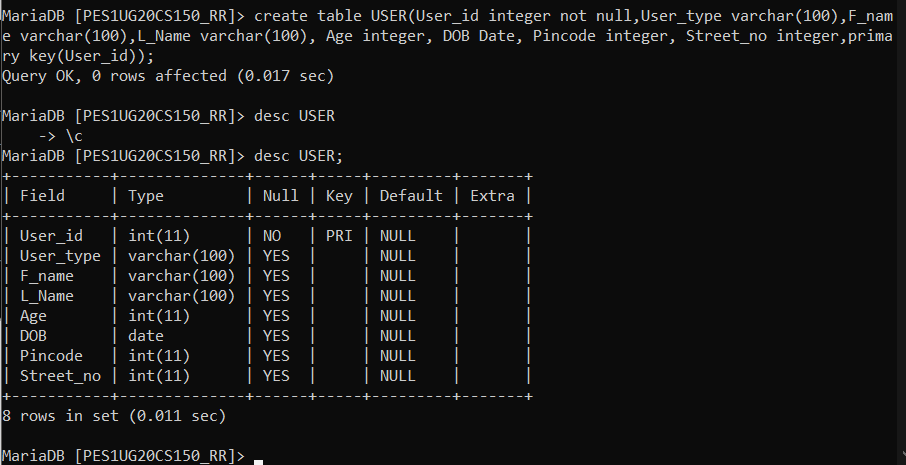
create table ROUTE\_INFO(From\_Station\_No integer,From\_Station\_Name varchar(100),To\_Station\_No integer,To\_Station\_Name varchar(100),Distance varchar(50) ,Train\_no integer,primary key(From\_Station\_No,To\_Station\_No),foreign key(Train\_no) references TRAIN(Train\_no));

desc ROUTE\_INFO;



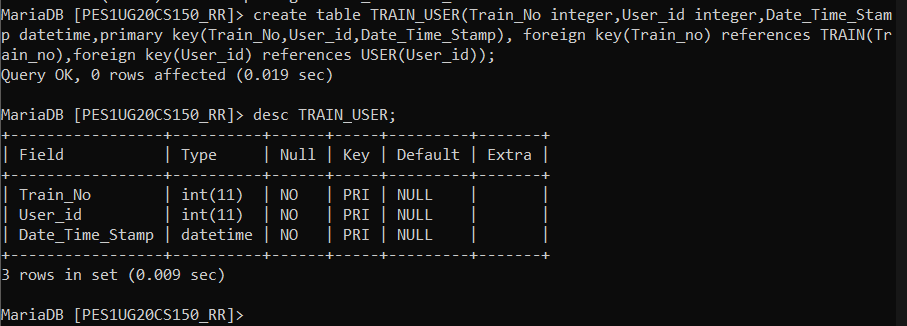
create table USER(User\_id integer not null,User\_type varchar(100),F\_name varchar(100),L\_Name varchar(100), Age integer, DOB Date, Pincode integer, Street\_no integer,primary key(User\_id));

desc USER;



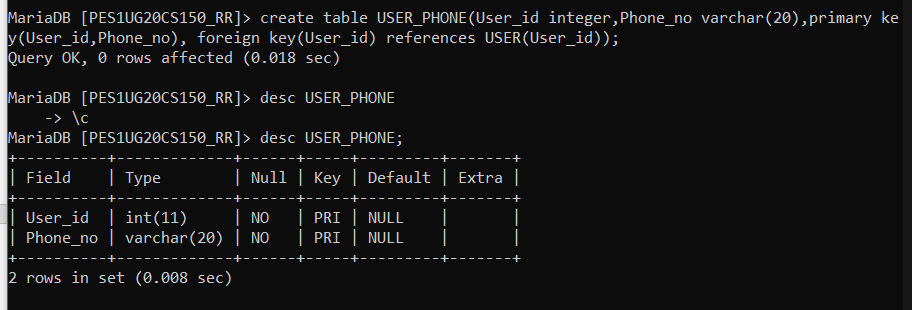
create table TRAIN\_USER(Train\_No integer,User\_id integer,Date\_Time\_Stamp datetime,primary key(Train\_No,User\_id,Date\_Time\_Stamp), foreign key(Train\_no) references TRAIN(Train\_no),foreign key(User\_id) references USER(User\_id));

desc TRAIN\_USER;



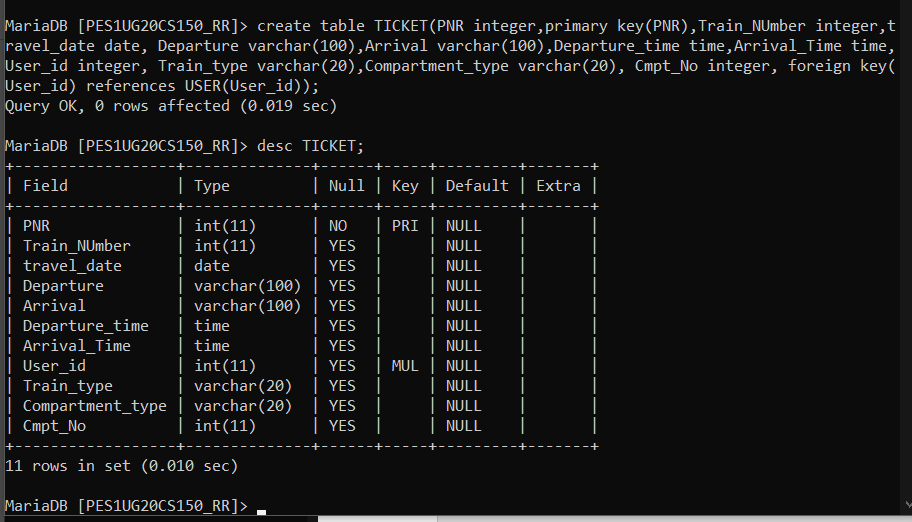
create table USER\_PHONE(User\_id integer,Phone\_no varchar(20),primary key(User\_id,Phone\_no), foreign key(User\_id) references USER(User\_id));

desc USER\_PHONE;



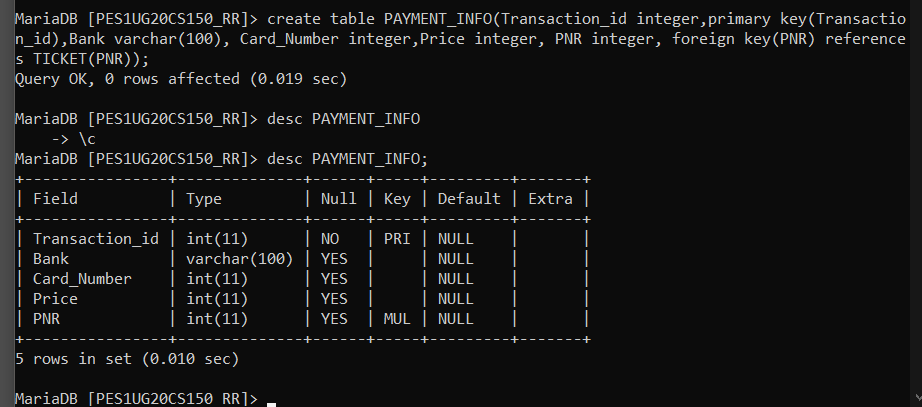
create table TICKET(PNR integer,primary key(PNR),Train\_NUmber integer,travel\_date date, Departure varchar(100),Arrival varchar(100),Departure\_time time,Arrival\_Time time,User\_id integer, Train\_type varchar(20),Compartment\_type varchar(20), Cmpt\_No integer, foreign key(User\_id) references USER(User\_id));

desc TICKET;



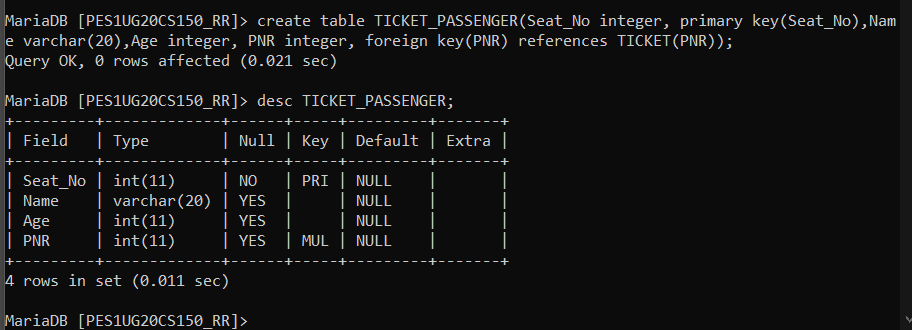
create table PAYMENT\_INFO(Transaction\_id integer,primary key(Transaction\_id),Bank varchar(100), Card\_Number integer,Price integer, PNR integer, foreign key(PNR) references TICKET(PNR));

desc PAYMENT\_INFO;



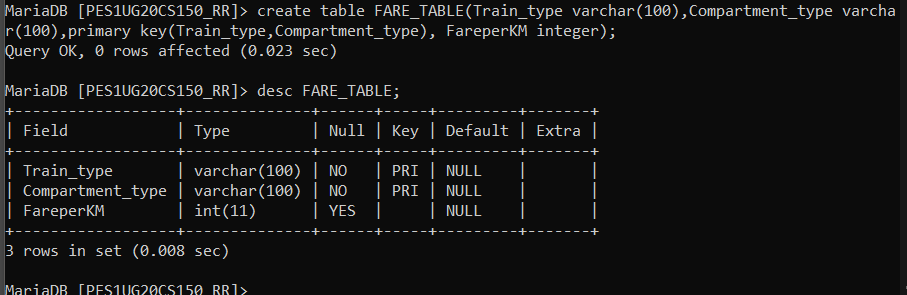
create table TICKET\_PASSENGER(Seat\_No integer, primary key(Seat\_No),Name varchar(20),Age integer, PNR integer, foreign key(PNR) references TICKET(PNR));

desc TICKET\_PASSENGER;



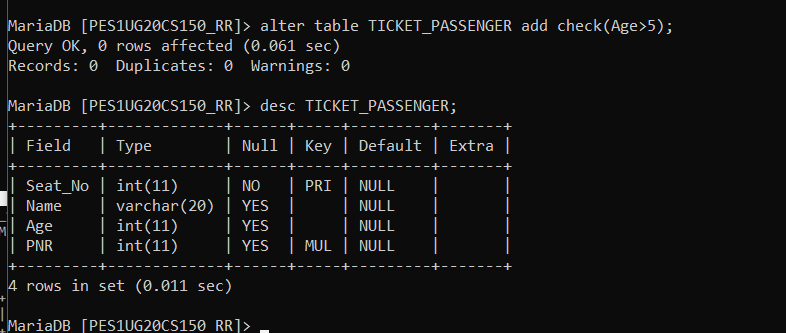
create table FARE\_TABLE(Train\_type varchar(100),Compartment\_type varchar(100),primary key(Train\_type,Compartment\_type), FareperKM integer);

desc FARE\_TABLE;



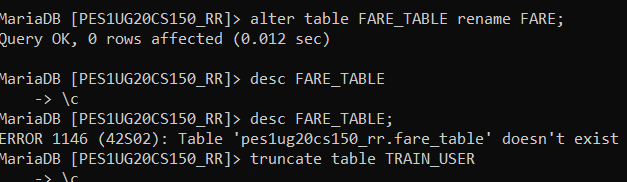
alter table TICKET\_PASSENGER add check(Age>5);

desc TICKET\_PASSENGER;



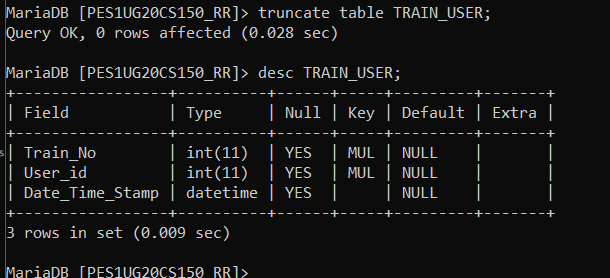
alter table FARE\_TABLE rename FARE;

desc FARE\_TABLE;



truncate table TRAIN\_USER;

desc TRAIN\_USER;



drop table TRAIN\_USER;

desc TRAIN\_USER;

