

DATABASE
MANAGEMENT
SYSTEM
LAB-3
DDL COMMANDS

NAME: VISHWAS M

SRN : PES2UG20CS390

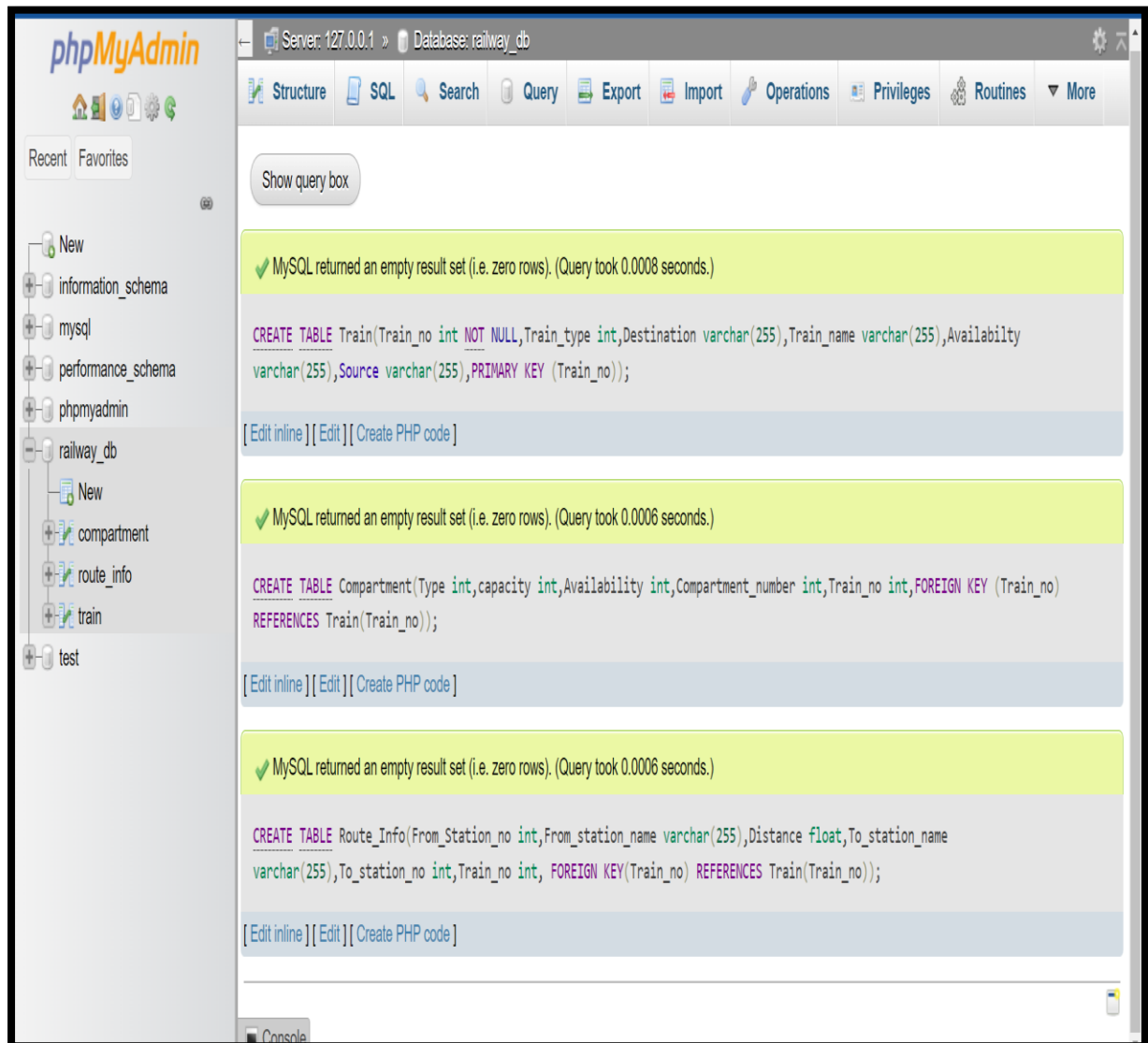
SEC : F

DATE : 04/09/2022

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

1)PK and FK constraints for all applicable Relations

i)



ii)

The screenshot displays the phpMyAdmin web interface. The top navigation bar includes tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, and More. The left sidebar shows a tree view of databases and tables, with 'railway_db' selected. The main content area shows the results of three SQL queries, each returning an empty result set (zero rows).

Query 1:

```
CREATE TABLE Users(User_ID int NOT NULL,F_name varchar(255),L_name varchar(255),DOB Date,Pin_code int,Strret_no int,User_type int,Mobile varchar(10),PRIMARY KEY (User_id));
```

Query 2:

```
CREATE TABLE Checks(Date_time_stamp Date,Train_no int, User_ID int,PRIMARY KEY (Train_no,User_ID),FOREIGN KEY (Train_no) REFERENCES Train(Train_no),FOREIGN KEY (User_ID) REFERENCES users(User_ID));
```

Query 3:

```
CREATE TABLE Payment_Info(Transaction_number int NOT NULL,Card_no varchar(20),Bank varchar(255),PRIMARY KEY (Transaction_number));
```

iii)

The screenshot displays the phpMyAdmin web interface. The top navigation bar includes tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, and More. The left sidebar shows a tree view of databases, with 'railway_db' selected and expanded to show tables: checks, compartment, payment_info, route_info, train, users, and test. The main content area shows two successful SQL queries. The first query creates the 'Fare_Table' with columns: Compartment_type (int, NOT NULL, PRIMARY KEY), Fare_per_km (float), and Train_type (int). The second query creates the 'Ticket' table with columns: PNR (int, NOT NULL, PRIMARY KEY), Travel_date (Date), Age (int), Name (varchar(255)), Seat_no (int), Departure Time, Arrival Time, User_ID (int, FOREIGN KEY to users), and Compartment_type (int, FOREIGN KEY to fare_table). Both queries returned an empty result set.

Server: 127.0.0.1 » Database: railway_db

Structure SQL Search Query Export Import Operations Privileges Routines More

Recent Favorites

New

- information_schema
- mysql
- performance_schema
- phpmyadmin
- railway_db**
 - New
 - checks
 - compartment
 - payment_info
 - route_info
 - train
 - users
- test

Show query box

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0008 seconds.)

```
CREATE TABLE Fare_Table(Compartment_type int NOT NULL,Fare_per_km float,Train_type int,PRIMARY KEY (Compartment_type));
```

[Edit inline] [Edit] [Create PHP code]

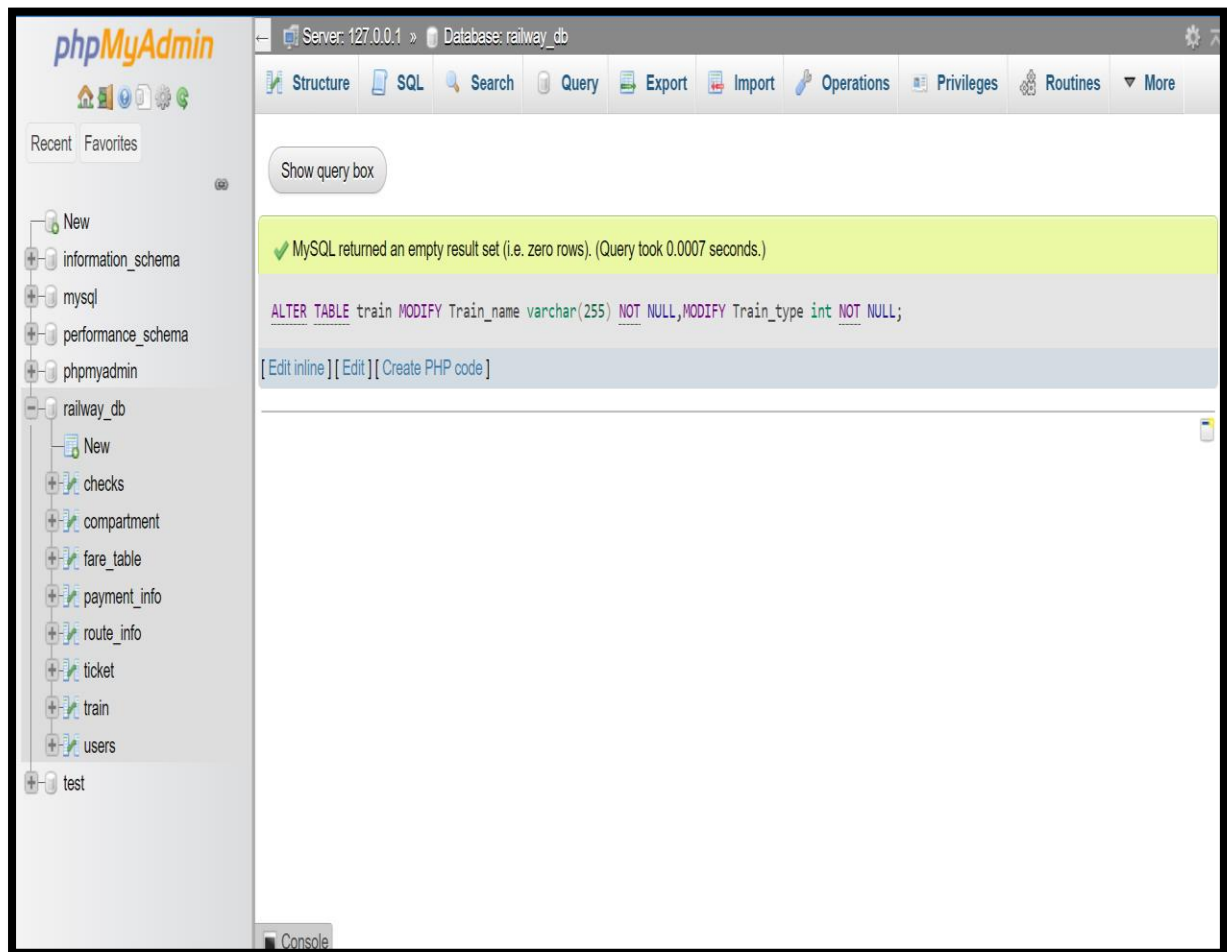
✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0007 seconds.)

```
CREATE TABLE Ticket(PNR int NOT NULL,Travel_date Date,Age int,Name varchar(255),Seat_no int,Departure Time,Arrival Time,User_ID int,Compartment_type int,PRIMARY KEY (PNR),FOREIGN KEY (User_ID) REFERENCES users(User_ID),FOREIGN KEY (Compartment_type) REFERENCES fare_table(Compartment_type));
```

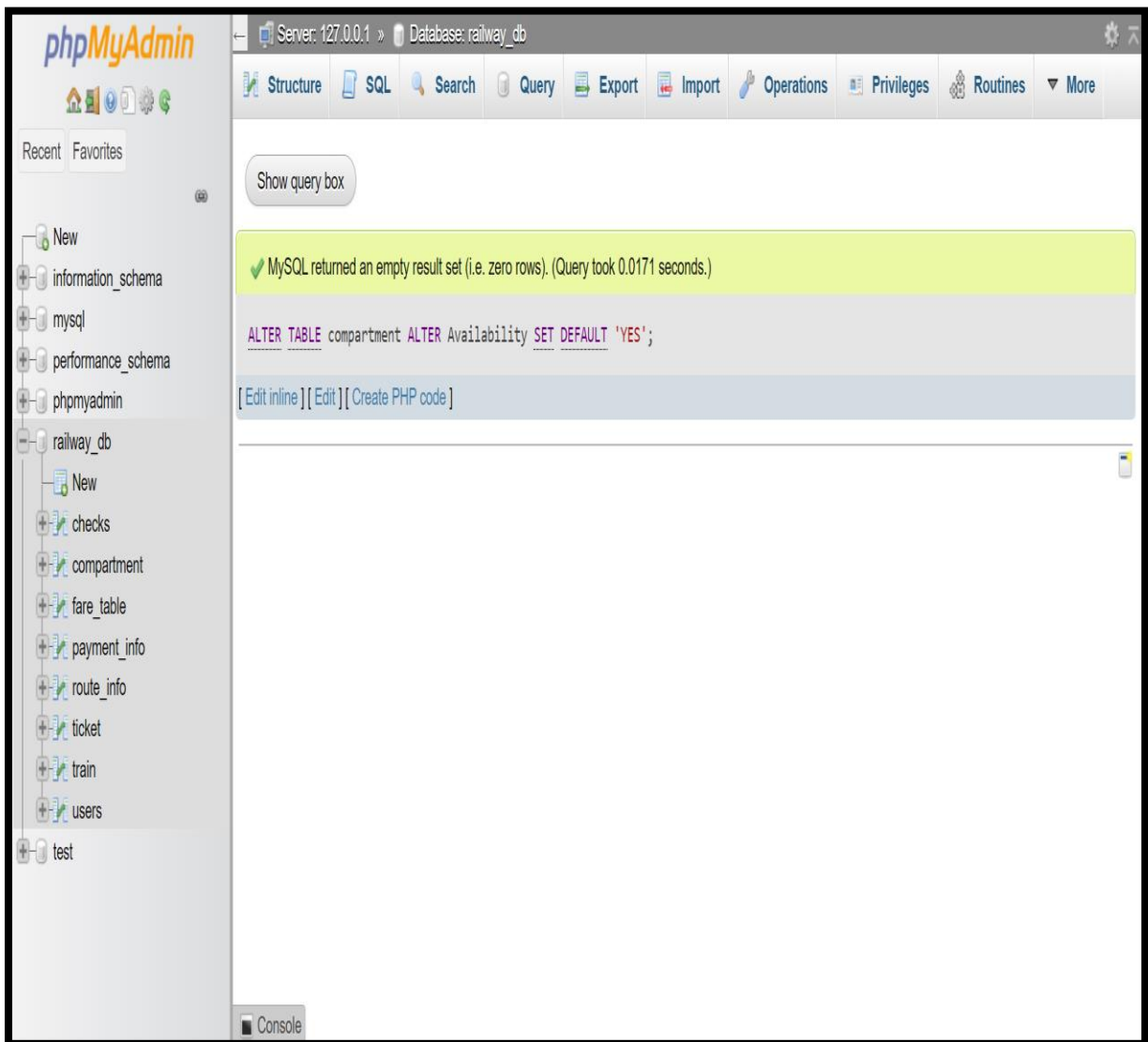
[Edit inline] [Edit] [Create PHP code]

Console

2) For Train_name, Train_Type in Train table add not null constraints value



3) Add defaultconstraint for compartment table setting Availability attribute to Yes



The screenshot shows the phpMyAdmin web interface. The left sidebar displays a tree view of databases, with 'railway_db' selected. The main panel shows the 'SQL' tab active. A query box contains the SQL statement: `ALTER TABLE compartment ALTER Availability SET DEFAULT 'YES';`. Below the query box, a green message bar indicates: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0171 seconds.)'. The interface also includes a top navigation bar with tabs like Structure, SQL, Search, Query, Export, Import, Operations, Privileges, and Routines. A 'Console' tab is visible at the bottom left.

Server: 127.0.0.1 » Database: railway_db

Structure SQL Search Query Export Import Operations Privileges Routines More

Recent Favorites

New

- information_schema
- mysql
- performance_schema
- phpmyadmin
- railway_db**
 - New
 - checks
 - compartment
 - fare_table
 - payment_info
 - route_info
 - ticket
 - train
 - users
- test

Show query box

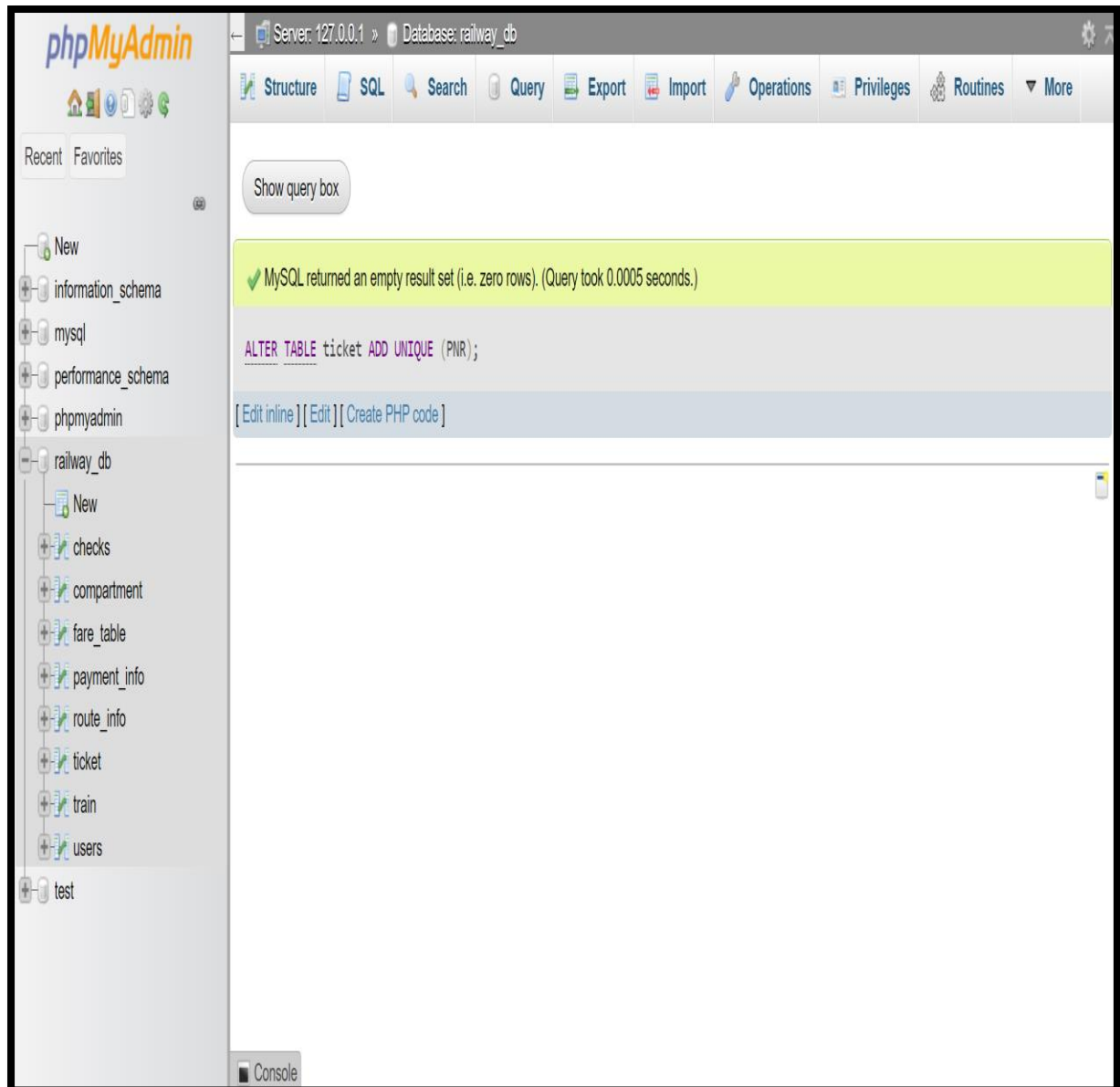
✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0171 seconds.)

```
ALTER TABLE compartment ALTER Availability SET DEFAULT 'YES';
```

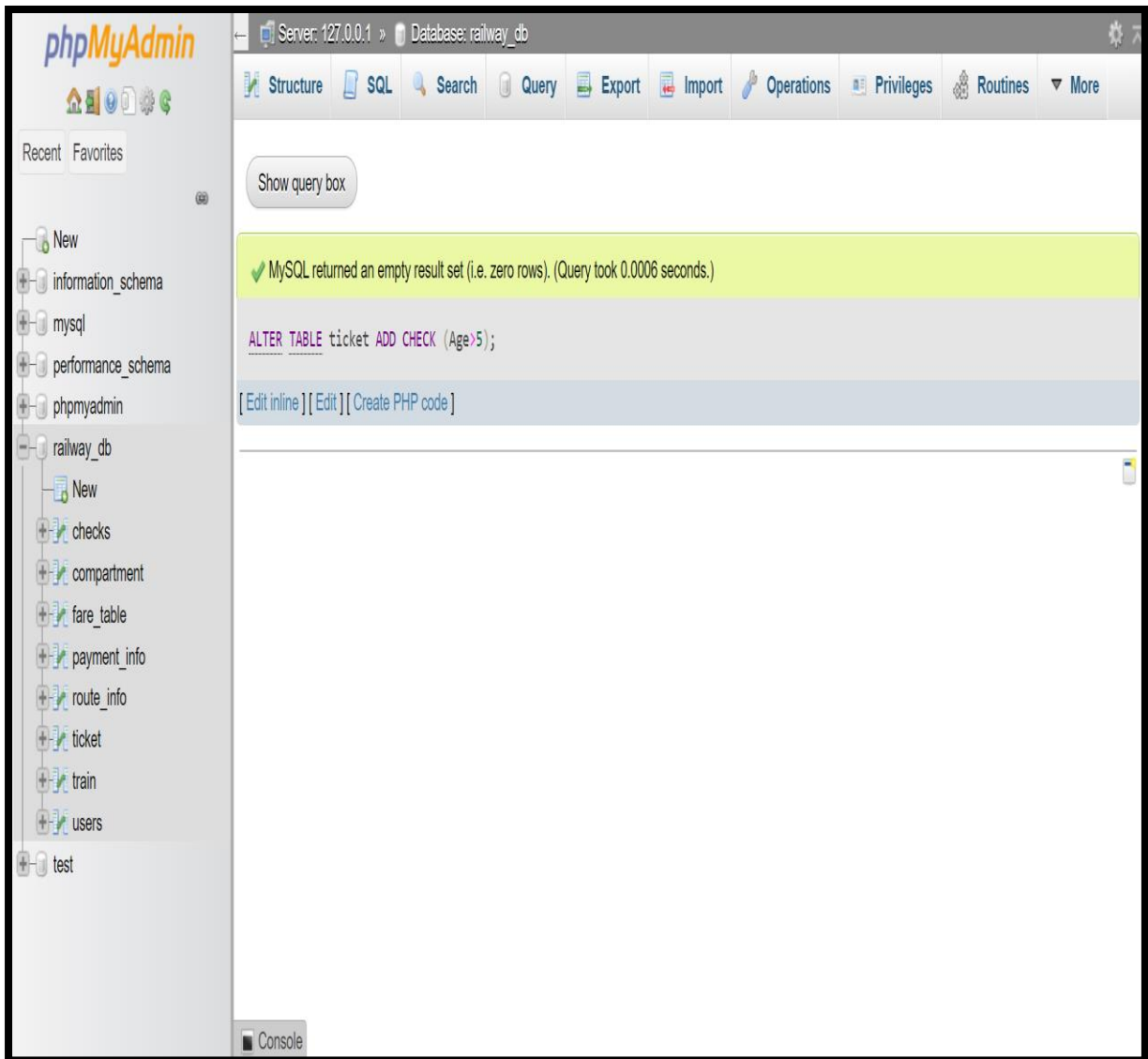
[Edit inline] [Edit] [Create PHP code]

Console

4) PNR should be unique



5) Add check constraints to Age in the invoice (Age>5)



6)Rename the table

The screenshot shows the phpMyAdmin interface. The top navigation bar indicates the current context: Server: 127.0.0.1 » Database: railway_db » Table: train_ticket. The sidebar on the left displays a tree view of the database structure, including schemas (information_schema, mysql, performance_schema, phpmyadmin) and the 'railway_db' database with its tables (checks, compartment, fare_table, payment_info, route_info, ticket, train, users, test). The main content area shows a successful query execution message: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0221 seconds.)'. Below this, the SQL query 'SELECT * FROM `train_ticket`' is displayed. A table view of the query results is shown, with columns: PNR, Travel_date, Age, Name, Seat_no, Departure, Arrival, User_ID, and Compartment_type. The table is currently empty. Below the table view, there are options for 'Query results operations' (Create view) and 'Bookmark this SQL query' (Label: [input field], Let every user access this bookmark checkbox, Bookmark this SQL query button). A 'Console' tab is visible at the bottom left.

Server: 127.0.0.1 » Database: railway_db » Table: train_ticket

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0221 seconds.)

```
SELECT * FROM `train_ticket`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

PNR	Travel_date	Age	Name	Seat_no	Departure	Arrival	User_ID	Compartment_type
-----	-------------	-----	------	---------	-----------	---------	---------	------------------

Query results operations

Create view

Bookmark this SQL query

Label: ☐ Let every user access this bookmark

Bookmark this SQL query

Console

7) Create a view using create view command

The screenshot displays the phpMyAdmin web interface. The top navigation bar includes tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, and a More dropdown. The left sidebar shows a tree view of databases and tables, with 'railway_db' selected. The main content area shows the results of a SQL query. A green message box indicates that the query was successful: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0009 seconds.)'. Below this, the SQL command is displayed: `CREATE VIEW bangalore_train AS SELECT Train_name,Train_type,Train_no FROM train;`. At the bottom of the main area, there are links for [Edit inline], [Edit], and [Create PHP code]. A 'Show query box' button is located above the message box. The bottom status bar shows 'Console'.

Server: 127.0.0.1 » Database: railway_db

Structure SQL Search Query Export Import Operations Privileges Routines More

Recent Favorites

Show query box

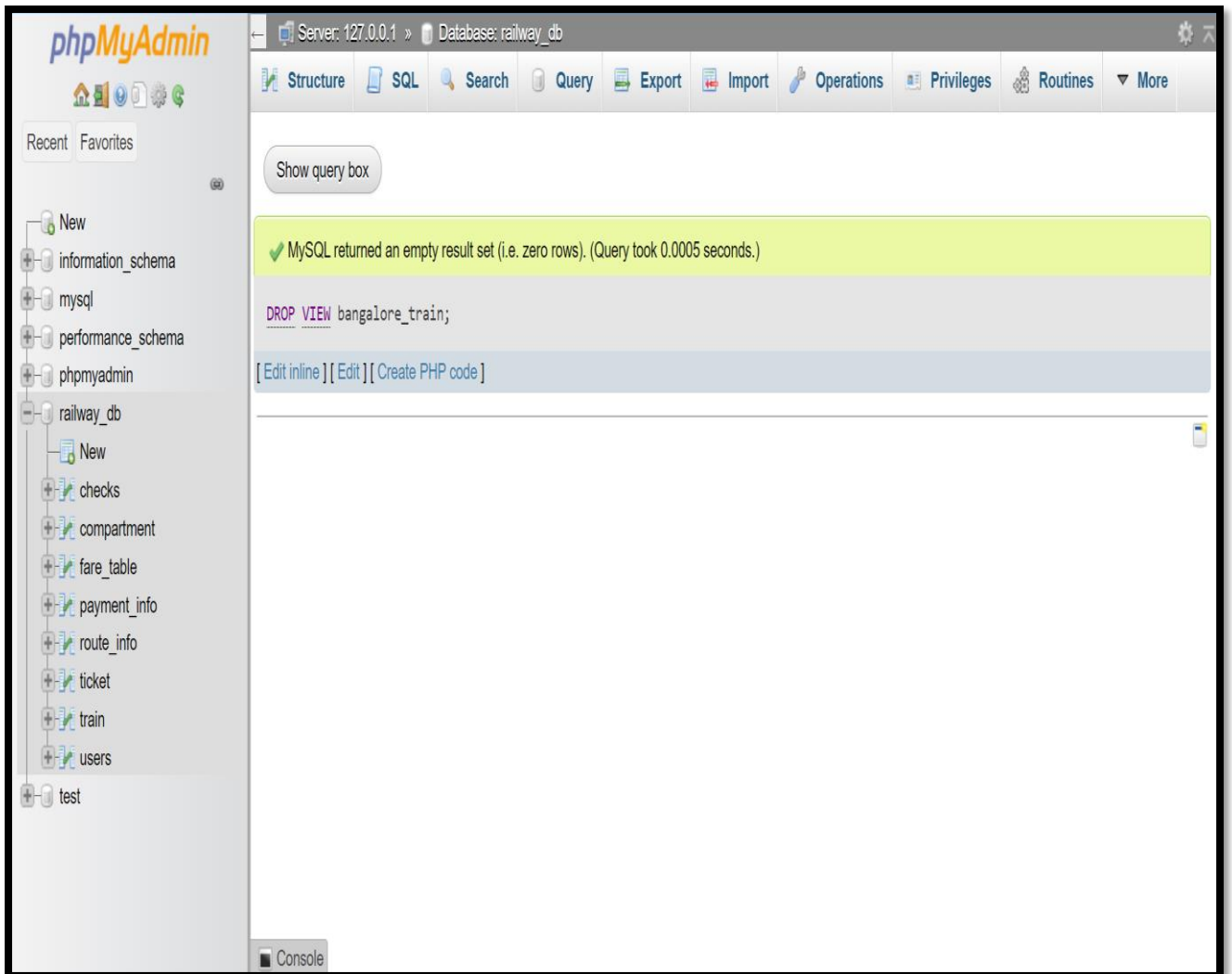
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0009 seconds.)

`CREATE VIEW bangalore_train AS SELECT Train_name,Train_type,Train_no FROM train;`

[Edit inline] [Edit] [Create PHP code]

Console

8) use drop commands



OVERALL DATABASE:

phpMyAdmin

Recent

Favorites

New

information_schema

mysql

performance_schema

phpmyadmin

railway_db

New

checks

compartment

fare_table

payment_info

route_info

ticket

train

users

test

Server: 127.0.0.1 » Database: railway_db

Structure

SQL

Search

Query

Export

Import

Operations

Privileges

Routines

More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> checks	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> compartment	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> fare_table	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> payment_info	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> route_info	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	32.0 KiB	-
<input type="checkbox"/> ticket	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	64.0 KiB	-
<input type="checkbox"/> train	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> users	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
8 tables	Sum	0	InnoDB	utf8mb4_general_ci	224.0 KiB	0 B

Console