

# **DATABASE** **MANAGEMENT** **SYSTEM** **LAB-9** **TRIGGERS**

NAME: VISHWAS M

SRN : PES2UG20CS390

SEC : F

DATE : 03/11/2022

## Demo:

The screenshot shows the phpMyAdmin interface with the 'ebike' database selected. The left sidebar lists the database structure, including tables like 'bike', 'customer', 'dealer', 'invoice', 'mechanic', 'parts', 'salesperson', 'service\_ticket', and 'works\_on'. The main panel displays the 'SQL' tab with a query box containing a CREATE TRIGGER statement. Below the query box, a green message bar indicates: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.1058 seconds.)'. The query text is: 

```
CREATE TRIGGER before_update_Accessories BEFORE UPDATE ON parts FOR EACH ROW BEGIN DECLARE error_msg VARCHAR(255); SET error_msg = ('The new quantity cannot be greater than 2 times the current quantity'); IF new.Qty > old.Qty * 2 THEN SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = error_msg; END IF; END;
```

The screenshot shows the phpMyAdmin interface with the 'ebike' database selected. The left sidebar is the same as the previous screenshot. The main panel displays the 'SQL' tab with a query box containing an UPDATE statement. Below the query box, a red error message bar indicates: 'Error SQL query: [Copy](#) UPDATE parts set Qty=25 where P\_ID=704; MySQL said: #1644 - The new quantity cannot be greater than 2 times the current quantity'. The query text is: 

```
UPDATE parts set Qty=25 where P_ID=704;
```

phpMyAdmin

Server: 127.0.0.1 » Database: ebike

Structure SQL Search Query Export Import Operations Privileges Routines More

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Show query box

1 row affected. (Query took 0.0168 seconds.)

```
UPDATE parts set Qty=8 where P_ID=763;
```

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

Console

ebike

- Functions
- Procedures
- Tables
  - New
  - bike
  - customer
  - dealer
  - invoice
  - mechanic
  - parts
  - salesperson
  - service\_ticket
  - works\_on
- foodorder
- food\_order
- information\_schema
- library
- mysql

phpMyAdmin

Server: 127.0.0.1 » Database: ebike » Table: parts

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

			P_ID	Description	Qty	Price	Service_ID	
<input type="checkbox"/>	Edit	Copy	Delete	700	Air Filter	0	217.99	500
<input type="checkbox"/>	Edit	Copy	Delete	701	Chain Set	0	1987.99	501
<input type="checkbox"/>	Edit	Copy	Delete	702	Clutch Plate	4	517.99	504
<input type="checkbox"/>	Edit	Copy	Delete	703	Handle Bar	8	2519.99	505
<input type="checkbox"/>	Edit	Copy	Delete	704	Horn	5	1675.78	502
<input type="checkbox"/>	Edit	Copy	Delete	705	Leg Guard	101	6217.99	503

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

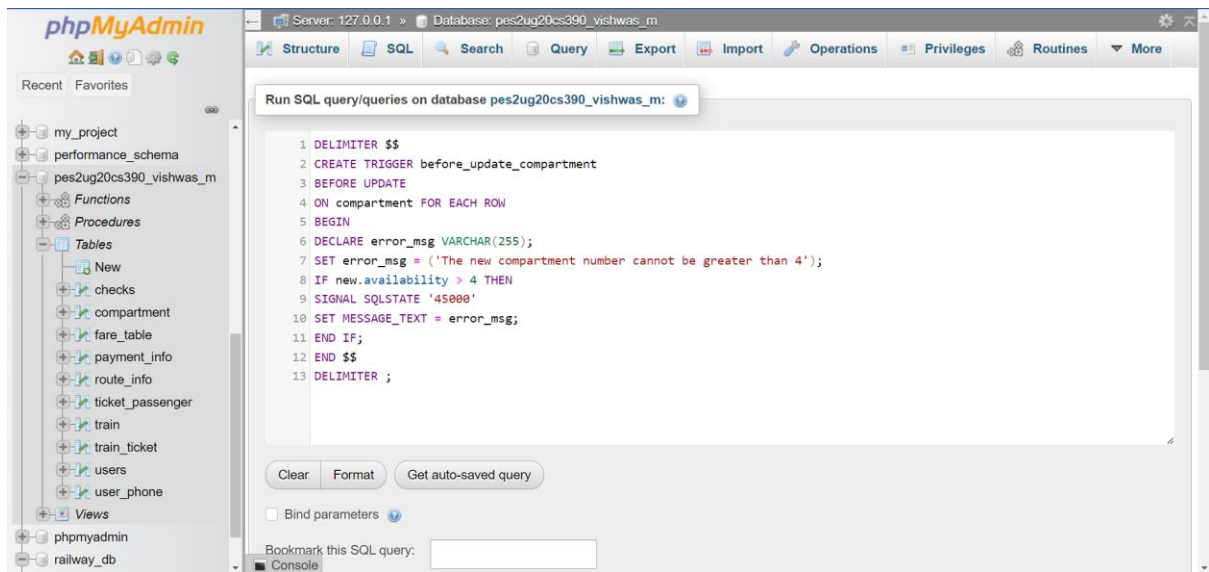
Console

parts operations

ebike

- Functions
- Procedures
- Tables
  - New
  - bike
  - customer
  - dealer
  - invoice
  - mechanic
  - parts
  - salesperson
  - service\_ticket
  - works\_on
- foodorder
- food\_order
- information\_schema
- library
- mysql

## ASSIGNMENT 1:



Server: 127.0.0.1 > Database: pes2ug20cs390\_vishwas\_m

Structure SQL Search Query Export Import Operations Privileges Routines More

Run SQL query/queries on database pes2ug20cs390\_vishwas\_m:

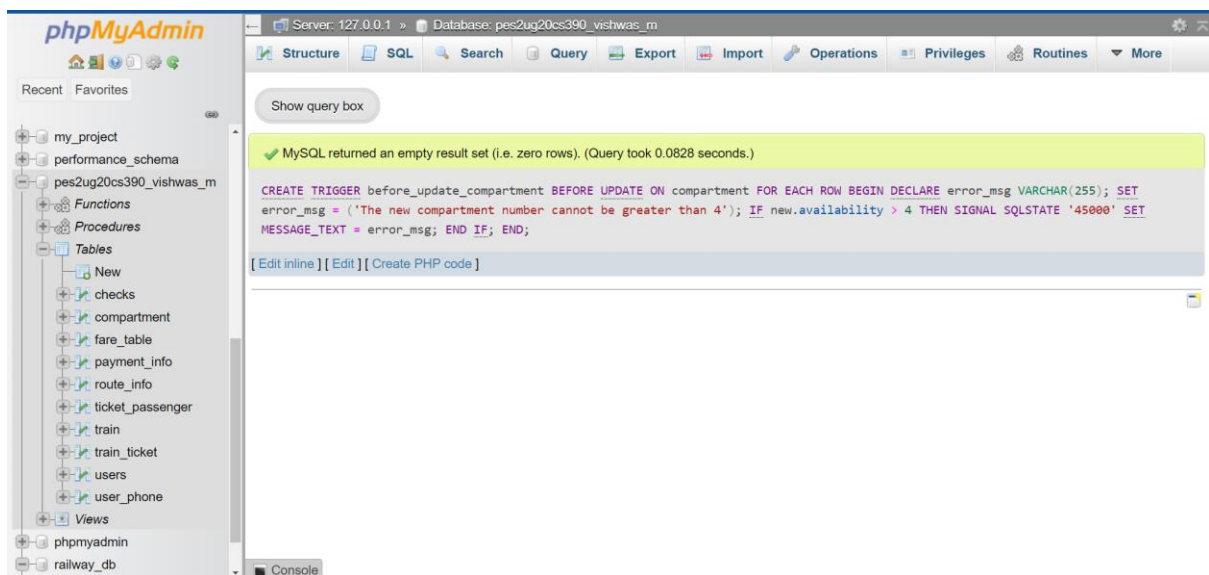
```
1 DELIMITER $$
2 CREATE TRIGGER before_update_compartment
3 BEFORE UPDATE
4 ON compartment FOR EACH ROW
5 BEGIN
6 DECLARE error_msg VARCHAR(255);
7 SET error_msg = ('The new compartment number cannot be greater than 4');
8 IF new.availability > 4 THEN
9 SIGNAL SQLSTATE '45000'
10 SET MESSAGE_TEXT = error_msg;
11 END IF;
12 END $$
13 DELIMITER ;
```

Clear Format Get auto-saved query

☐ Bind parameters

Bookmark this SQL query:

Console



Server: 127.0.0.1 > Database: pes2ug20cs390\_vishwas\_m

Structure SQL Search Query Export Import Operations Privileges Routines More

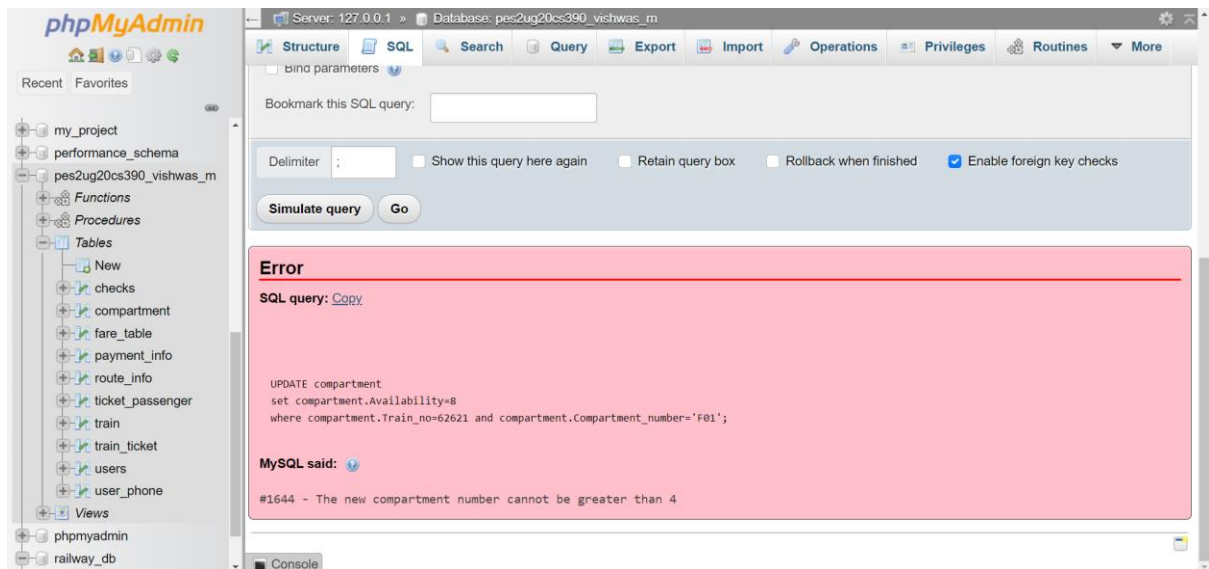
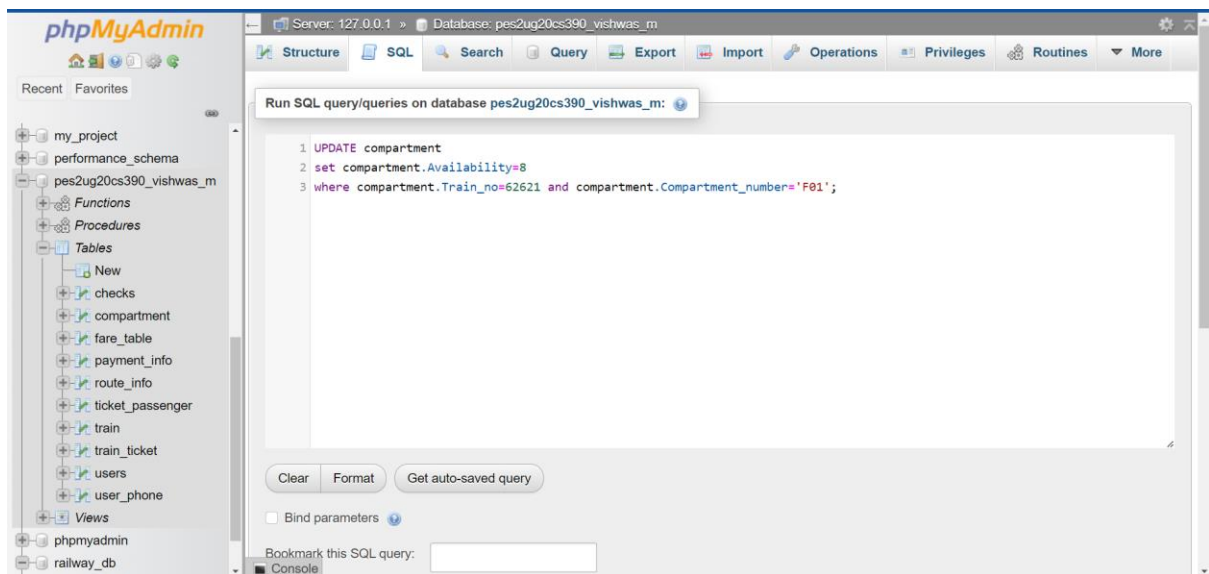
Show query box

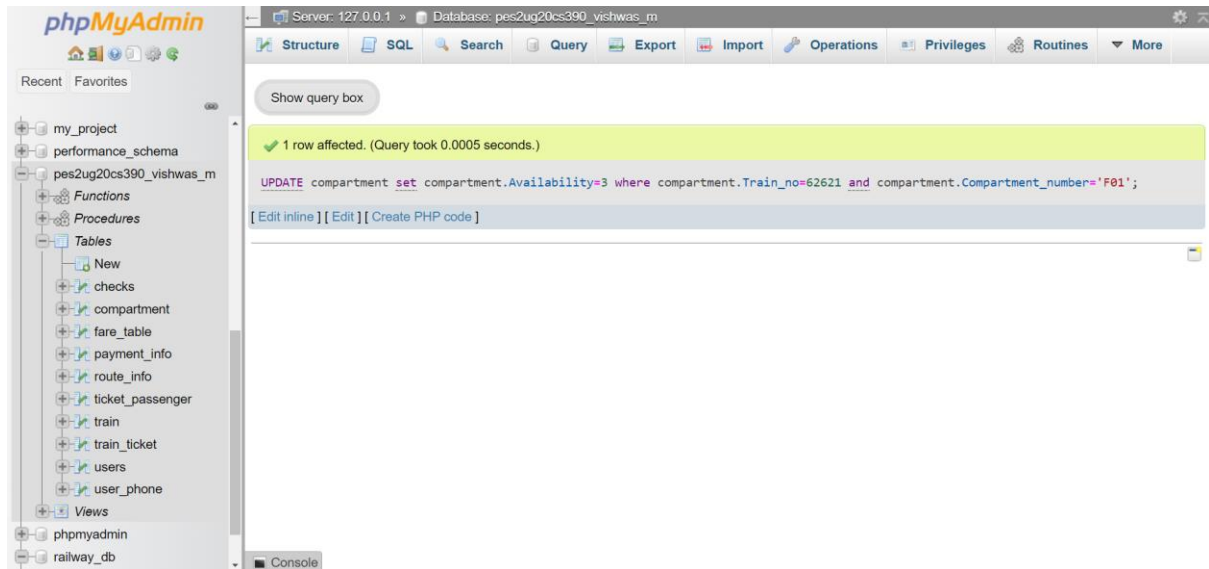
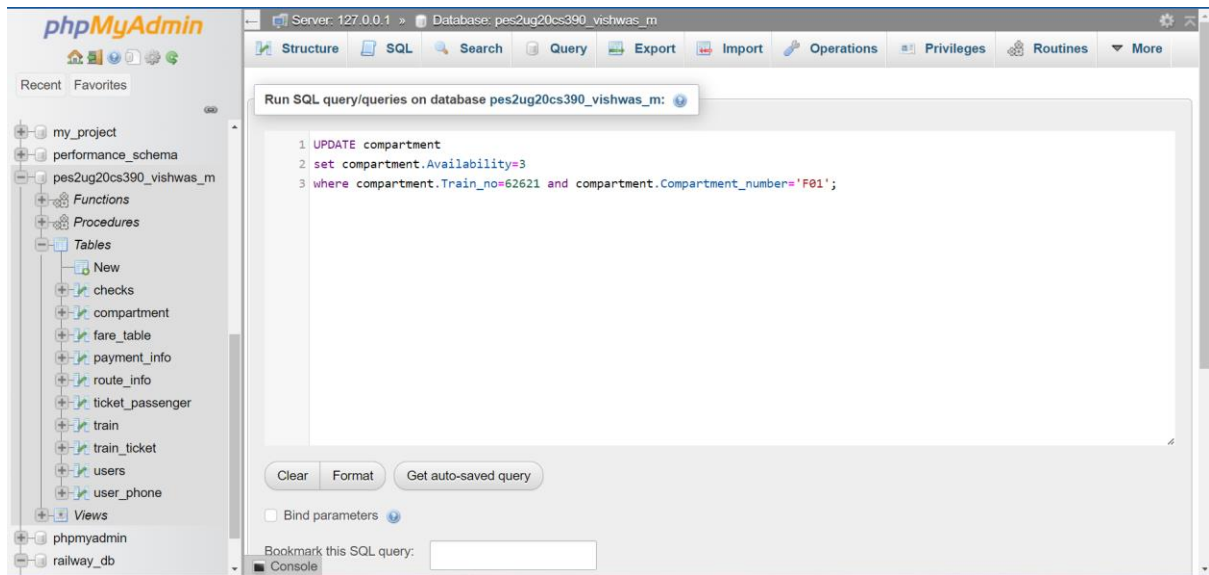
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0828 seconds.)

```
CREATE TRIGGER before_update_compartment BEFORE UPDATE ON compartment FOR EACH ROW BEGIN DECLARE error_msg VARCHAR(255); SET error_msg = ('The new compartment number cannot be greater than 4'); IF new.availability > 4 THEN SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = error_msg; END IF; END;
```

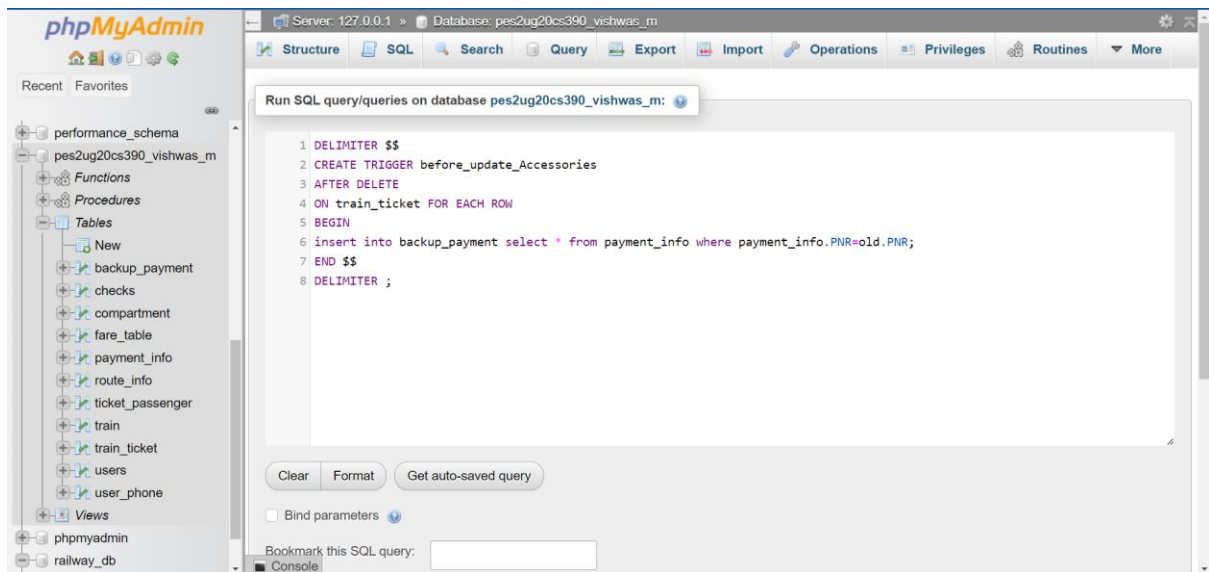
[ Edit inline ] [ Edit ] [ Create PHP code ]

Console





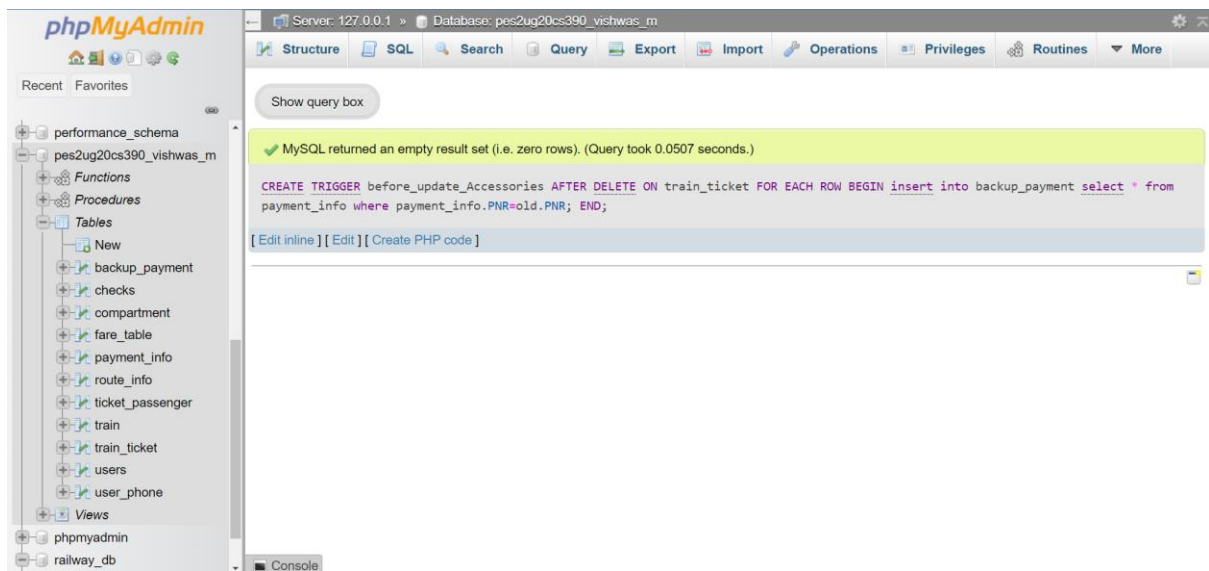
## ASSIGNMENT 2:



The screenshot shows the phpMyAdmin interface with the SQL editor open. The left sidebar displays the database structure for 'pes2ug20cs390\_vishwas\_m', including tables like 'backup\_payment', 'checks', 'compartment', 'fare\_table', 'payment\_info', 'route\_info', 'ticket\_passenger', 'train', 'train\_ticket', 'users', and 'user\_phone'. The main editor area contains the following SQL query:

```
1 DELIMITER $$
2 CREATE TRIGGER before_update_Accessories
3 AFTER DELETE
4 ON train_ticket FOR EACH ROW
5 BEGIN
6 insert into backup_payment select * from payment_info where payment_info.PNR=old.PNR;
7 END $$
8 DELIMITER ;
```

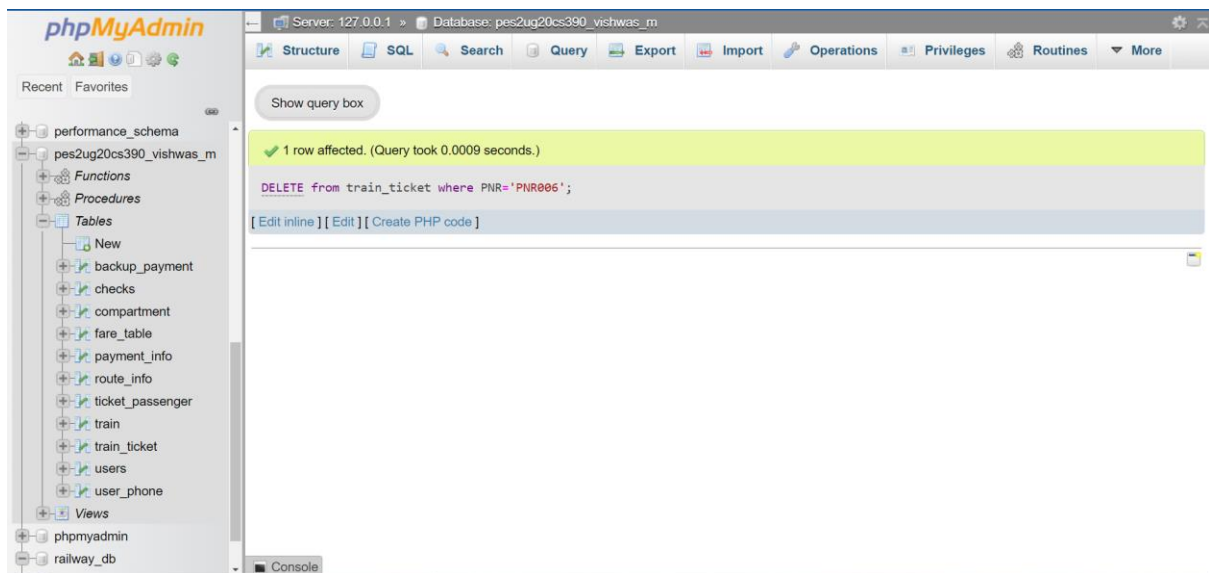
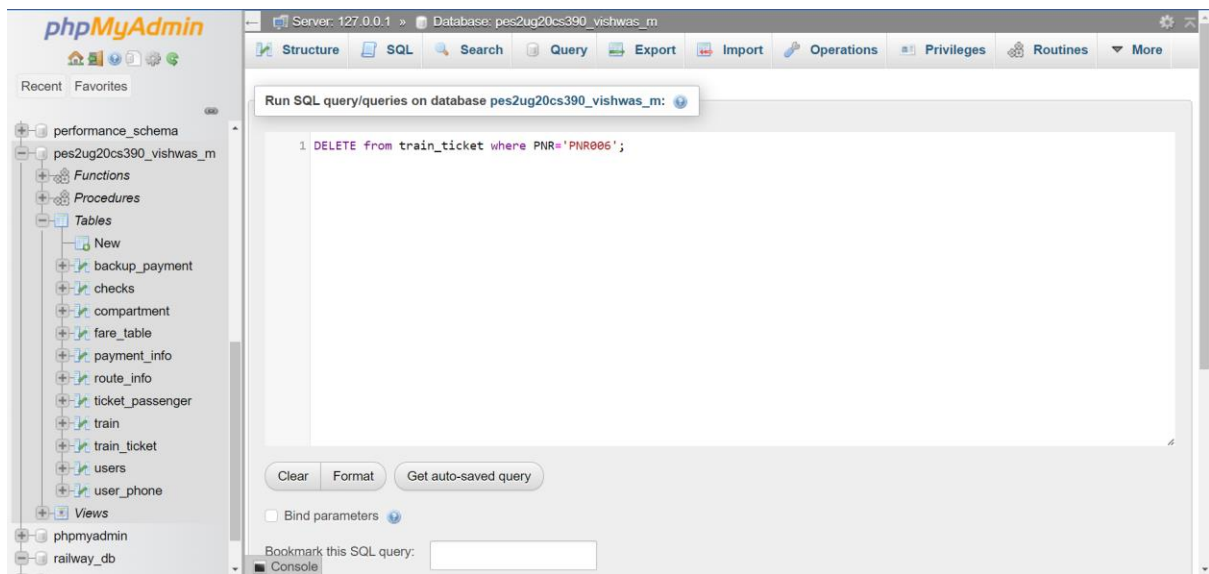
Below the query editor, there are buttons for 'Clear', 'Format', and 'Get auto-saved query'. A 'Bind parameters' checkbox is also present. At the bottom, there is a 'Bookmark this SQL query:' field and a 'Console' tab.



The screenshot shows the phpMyAdmin interface after the SQL query has been executed. The main editor area displays a green success message: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.0507 seconds.)'. Below this, the executed SQL query is shown in a syntax-highlighted format:

```
CREATE TRIGGER before_update_Accessories AFTER DELETE ON train_ticket FOR EACH ROW BEGIN insert into backup_payment select * from payment_info where payment_info.PNR=old.PNR; END;
```

At the bottom of the editor, there are links for '[ Edit inline ]', '[ Edit ]', and '[ Create PHP code ]'. The 'Console' tab is visible at the bottom left.





phpMyAdmin

Server: 127.0.0.1 » Database: pes2ug20cs390\_vishwas\_m » Table: backup\_payment

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0007 seconds.)

```
SELECT * FROM `backup_payment`
```

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

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

Transaction_id	Bank	Card_no	Price	PNR
146445	HDFC	1234325465675789	806.4	PNR006

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console mark this SQL query