

PES University

DBMS Lab - 09

UE20CS301

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NOTE : I found out only today that we are supposed to have our SRN in the screenshots to prove that we ourselves have done it to prevent plagiarism. This note is to remind that my SRN is in the title of the terminal and hopefully that proves that I haven't plagiarised and this is my own pc on which I have been doing the tasks looking at the terminal titles from the previous weeks Folders. Thank you.

Task 1 :



The image shows two screenshots of a terminal window. The top screenshot shows the creation of a trigger named 'No_of_Compartments' in a database named 'railway'. The trigger is designed to prevent inserting more than 4 compartments for a given train number. The bottom screenshot shows an attempt to insert a record with 80 compartments, which results in an error (ERROR 1644 (45000): Train cant have more than 4 compartments).

```
al Nov 5 20:18
shanks@One-Piece:~/Desktop/PES1UG20CS438_Lab3/Lab_4/Lab_5/Lab_6/Lab_7/Lab_8/Lab_9
MariaDB [railway]> DELIMITER $$
MariaDB [railway]> CREATE TRIGGER No_of_Compartments BEFORE INSERT on compartment FOR EACH ROW
-> BEGIN
->   DECLARE num int;
->   DECLARE err varchar(200);
->   SET err = "Train cant have more than 4 compartments";
->   SELECT COUNT(*) INTO num FROM compartment GROUP BY train_number HAVING train_number = new.train_number;
->   IF num > 4 THEN
->     SIGNAL SQLSTATE '45000'
->     SET MESSAGE_TEXT = err;
->   END IF;
-> END;
-> $$
Query OK, 0 rows affected (0.154 sec)

al Nov 5 20:17
shanks@One-Piece:~/Desktop/PES1UG20CS438_Lab3/Lab_4/Lab_5/Lab_6/Lab_7/Lab_8/Lab_9
MariaDB [railway]> insert into compartment values ('G04','III Class',80,3,58450);
ERROR 1644 (45000): Train cant have more than 4 compartments
MariaDB [railway]>
```

Task 2 :

```
Nov 5 21:05
shanks@One-Piece:~/Desktop/PES1UG20CS438_Lab3/Lab_4/Lab_5/Lab_6/Lab_7/Lab_8/Lab_9

MariaDB [railway]> ALTER TABLE payment_info DROP FOREIGN KEY payment_info_ibfk_1;
Query OK, 0 rows affected (0.365 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [railway]> DELETE FROM ticket where PNR = 'PNR007';
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`railway`.`ticket_passenger`, CONSTRAINT `ticket_passenger_ibfk_1` FOREIGN KEY (`pnr`) REFERENCES `ticket` (`pnr`))
MariaDB [railway]> ALTER TABLE ticket_passenger DROP FOREIGN KEY ticket_passenger_ibfk_1;
Query OK, 0 rows affected (0.240 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [railway]> DELETE FROM ticket where PNR = 'PNR007';
Query OK, 1 row affected (0.038 sec)
```

```
Nov 5 21:07
shanks@One-Piece:~/Desktop/PES1UG20CS438_Lab3/Lab_4/Lab_5/Lab_6/Lab_7/Lab_8/Lab_9

MariaDB [railway]> select * from backup;
+-----+-----+-----+-----+-----+
| transaction_no | bank | card_no | price | pnr |
+-----+-----+-----+-----+-----+
| 576768 | ICICI | 7.56356E+15 | 322.00 | PNR007 |
+-----+-----+-----+-----+-----+
1 row in set (0.001 sec)

MariaDB [railway]>
```