

UE20CS301

Database Management System

Lab 9 – Creating Triggers

Name : Renita Kurian

SRN : PES1UG20CS331

Roll No. : 13

Question 1

```
MariaDB [railway_system]> DELIMITER $$
MariaDB [railway_system]> CREATE TRIGGER max4compartments
  -> BEFORE insert
  -> ON compartment_331 for each ROW
  -> BEGIN
  -> DECLARE error_msg VARCHAR(255);
  -> declare x int;
  -> SET error_msg = ('Cannot have more than four compartment');
  -> IF (select count(*) from compartment_331 where Train_No = new.Train_No) >= 4 THEN
  ->   SIGNAL SQLSTATE '45000'
  ->   SET MESSAGE_TEXT = error_msg;
  -> END IF;
  -> END $$
Query OK, 0 rows affected (0.010 sec)

MariaDB [railway_system]> DELIMITER ;
MariaDB [railway_system]> insert into compartment_331 values (58450,'S Class',30,3, 'S13');
ERROR 1644 (45000): Cannot have more than four compartment

MariaDB [railway_system]> insert into compartment_331 values (62620,'S Class',30,3, 'S13');
Query OK, 1 row affected (0.005 sec)
```

Question 2

```
MariaDB [railway_system]> CREATE TABLE PAYMENT_BACKUP_331 ( Transaction_ID varchar(30) PRIMARY KEY, Bank varchar(30),
Card_No varchar(16), Price int, PNR varchar(10) NOT NULL);
Query OK, 0 rows affected (0.022 sec)

MariaDB [railway_system]>
MariaDB [railway_system]> DELIMITER $$
MariaDB [railway_system]> CREATE TRIGGER paymentBackup
  -> BEFORE DELETE
  -> ON ticket_331 FOR EACH ROW
  -> BEGIN
  ->   Insert into PAYMENT_BACKUP_331 select * from payment_info_331 where PNR = old.PNR;
  ->   delete from payment_info_331 where PNR = old.PNR;
  ->   delete from passenger_331 where PNR = old.PNR;
  -> END $$
Query OK, 0 rows affected (0.008 sec)

MariaDB [railway_system]> DELIMITER ;
MariaDB [railway_system]> delete from ticket_331 where PNR = 'PNR015';
Query OK, 1 row affected (0.014 sec)

MariaDB [railway_system]> select * from payment_backup_331;
+-----+-----+-----+-----+-----+
| Transaction_ID | Bank      | Card_No      | Price | PNR      |
+-----+-----+-----+-----+-----+
| 758900         | UNION BANK | 2.43266E+15 | NULL  | PNR015   |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)
```