Name: Vrushank G SRN: PES1UG20CS516 Section: I

Task-II: Use DCL and TCL statements for the following:

1. Grant privileges on different tables to users and observe the effect.

MariaDB [(none)]> CREATE USER vrushank IDENTIFIED BY "123456"; Query OK, 0 rows affected (0.007 sec)

```
ASUS@DESKTOP-842748Q c:\xampp
# mysql -u vrushank -p
Enter password: ******
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 9
Server version: 10.4.24-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

MariaDB [pes1ug20cs516]> grant INSERT on pes1ug20cs516.ticket to vrushank; Query OK, 0 rows affected (0.004 sec)

MariaDB [pes1ug20cs516]> insert into ticket values("PNR020", 62620, "2022-09-26","Chennai","Katpadi","8:00:00","13:00:00 ","USR_020","Superfast","II Class","F02");
Query OK, 1 row affected (0.042 sec)

MariaDB [(none)]> grant select,delete,update on pes1ug20cs516.fare to vrushank; Query OK, 0 rows affected (0.003 sec)

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```
MariaDB [(none)]> select * from fare;
ERROR 1046 (3D000): No database selected
MariaDB [(none)]> use pes1ug20cs516;
Database changed
MariaDB [pes1ug20cs516]> select * from fare;
 train_type | compartment_type | fare_per_km |
 Fast
               I Class
               II Class
 Fast
               III Class
 Mail
  Mail
               II Class
  Mail
               III Class
  Superfast
               I Class
  Superfast
               II Class
             | III Class
  Superfast
 rows in set (0.001 sec)
MariaDB [pes1ug20cs516]> delete from fare where train_type="Superfast" and compartment_type="III Class";
Query OK, 1 row affected (0.006 sec)
MariaDB [pes1ug20cs516]> update fare set fare_per_km=4 where train_type="Superfast" and compartment_type="I Class";
Query OK, 1 row affected (0.004 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [pes1ug20cs516]> select * from fare;
 train_type | compartment_type | fare_per_km |
 Fast
               I Class
 Fast
               II Class
               III Class
 Mail
               I Class
 Mail
               II Class
               III Class
  Mail
  Superfast
               I Class
             | II Class
  Superfast
                                              2 |
 rows in set (0.000 sec)
```

2. Revoke UPDATE & DELETE privileges on any tables and observe the effect if any deletion/updation is performed.

MariaDB [(none)]> revoke delete,update on table pes1ug20cs516.fare from vrushank; Query OK, 0 rows affected (0.004 sec)

```
MariaDB [pes1ug20cs516]> select * from fare:
  train_type | compartment_type | fare_per_km |
                    I Class
  Fast
  Fast
                    II Class
  Fast
                    III Class
  Mail
                    I Class
  Mail
                    II Class
  Mail
                    III Class
  Superfast
                    I Class
                  | II Class
  Superfast
  rows in set (0.001 sec)
MariaDB [peslug20cs516]> delete from fare where train_type="Superfast" and compartment_type="III Class";
ERROR 1142 (42000): DELETE command denied to user 'vrushank'@'localhost' for table 'fare'
MariaDB [pes1ug20cs516]> update fare set fare_per_km=4 where train_type="Superfast" and compartment_type="I Class";
ERROR 1142 (42000): UPDATE command denied to user 'vrushank'@'localhost' for table 'fare'
```

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3. Create different save points and perform some insert/update/delete operations. Observe the effect of commit & rollback operations and release any created savepoints.

Task-2_3.sql file:

```
START TRANSACTION;
SAVEPOINT S1;
UPDATE ticket passenger
    seat_no = "S01-29",
    name = "vrushank",
    age = 19
WHERE pnr = "PNR015";
(SELECT * FROM ticket_passenger ORDER BY pnr DESC limit 5) ORDER BY pnr ASC;
SAVEPOINT S2;
INSERT INTO ticket_passenger
VALUES
    "S01-30",
    "Y Srinivas",
    20,
    "PNR020"
(SELECT * FROM ticket passenger ORDER BY pnr DESC limit 5) ORDER BY pnr ASC;
ROLLBACK TO S2;
(SELECT * FROM ticket passenger ORDER BY pnr DESC limit 5) ORDER BY pnr ASC;
ROLLBACK TO S1;
(SELECT * FROM ticket passenger ORDER BY pnr DESC limit 5) ORDER BY pnr ASC;
```

```
Name: Vrushank G SRN: PES1UG20CS516 Section: I
MariaDB [pes1ug20cs516]> source D:/RISHI/SEM5/DBMS/PES1UG20CS516 Lab4/Task-2 3.sql
Query OK, 0 rows affected (0.000 sec)
Query OK, 0 rows affected (0.000 sec)
Query OK, 1 row affected (0.003 sec)
Rows matched: 1 Changed: 1 Warnings: 0
 seat_no | name
                                 age pnr

      S01-26
      | Rakshita Prabhu | 21 | PNR010

      F01-7
      | Sheela Seth | 33 | PNR011

      F01-13
      | Ramya R | 45 | PNR012

                                     20 | PNR014
  S01-2
            Shradha Nayar
  S01-29 | vrushank | 19 | PNR015 |
5 rows in set (0.000 sec)
Query OK, 0 rows affected (0.000 sec)
Query OK, 1 row affected (0.000 sec)
                                age pnr
 seat_no name
 F01-7 | Sheela Seth | 33 | PNR011 | F01-13 | Ramya R | 45 | PNR012 | S01-2 | Shradha Nayar | 20 | PNR014 | S01-29 | vrushank | 19 | PNR015 |
  S01-29 i
  S01-30 | Y Srinivas | 20 | PNR020
5 rows in set (0.003 sec)
Query OK, 0 rows affected (0.000 sec)
 seat no | name
                     age pnr
   -----

      S01-26
      Rakshita Prabhu
      21
      PNR010

      F01-7
      Sheela Seth
      33
      PNR011

      F01-13
      Ramya R
      45
      PNR012

  S01-2 | Shradha Nayar
                                   20 | PNR014
                                   19 | PNR015
  S01-29 vrushank
 rows in set (0.000 sec)
```

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Query OK, 0 rows affected (0.001 sec)				
+ seat_no +	name	 age 	 pnr	
S01-26	Rakshita Prabhu	21	PNR010	
F01-7	Sheela Seth	33	PNR011	
F01-13	Ramya R	45	PNR012	
S01-2	Shradha Nayar	20	PNR014	
S01-29	Khushi Jha	18	PNR015	
+++ 5 rows in set (0.001 sec) MariaDB [pes1ug20cs516]> _				