UE20CS301

Database Management System

Lab 4 – Task II Results

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Roll No. : 13

Create User:

```
MariaDB [railway_system]> create user 'u331'@'localhost' identified by '331';
Query OK, 0 rows affected (0.005 sec)

MariaDB [railway_system]> exit
Bye

C:\xampp\mysql\bin>mysql -u u331 -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 19
Server version: 10.4.21-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)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
+--------------------+
1 row in set (0.001 sec)

MariaDB [(none)]> _
```

1. Grant privileges

```
C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 20
Server version: 10.4.21-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> grant all privileges on railway_system.* to 'u331'@'localhost';
Query OK, 0 rows affected (0.011 sec)
```

-- railway_system database present after executing grant command

```
C:\xampp\mysql\bin>mysql -u u331 -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.4.21-MariaDB mariadb.org binary distribution

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

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| railway_system     |
+--------------------+
2 rows in set (0.013 sec)
```

2. Revoke update and delete

```
MariaDB [(none)]> revoke UPDATE, DELETE on railway_system.* from 'u331'@'localhost';
Query OK, 0 rows affected (0.003 sec)

MariaDB [(none)]> _
```

After revoke –

```
MariaDB [railway_system]> update train_331 set t_type='mail' where t_type='post';
ERROR 1142 (42000): UPDATE command denied to user 'u331'@'localhost' for table 'train_331'
MariaDB [railway_system]>
```

3. Create different savepoints

i) Create a savepoint

```
MariaDB [railway_system]> use railway_system;
Database changed
MariaDB [railway_system]> set autocommit = 0;
Query OK, 0 rows affected (0.001 sec)

MariaDB [railway_system]> start transaction;
Query OK, 0 rows affected (0.003 sec)

MariaDB [railway_system]> update train_331 set t_type = 'post' where t_type = 'mail';
Query OK, 2 rows affected (0.002 sec)
Rows matched: 2  Changed: 2  Warnings: 0

MariaDB [railway_system]> savepoint sp1;
Query OK, 0 rows affected (0.002 sec)

MariaDB [railway_system]> select * from train_331;
+----------+------------------+-----------+-------------+------------+--------------+
| Train_No | T_Name           | T_Type    | Destination | Arrival    | Availability |
+----------+------------------+-----------+-------------+------------+--------------+
|    25260 | Chennai Mail     | post      | Chennai     | Mangaluru  | yes          |
|    25261 | Managaluru Mail  | post      | Mangaluru   | Chennai    | yes          |
|    58450 | MAN-BEN Express  | Fast      | Bengaluru   | Mangaluru  | yes          |
|    58451 | BEN-MAN Express  | Fast      | Mangaluru   | Bengaluru  | yes          |
|    62620 | CHE-BEN Shatabdi | Superfast | Bengaluru   | Chennai    | no           |
|    62621 | BEN-CHE Shatabdi | Superfast | Chennai     | Bengaluru  | yes          |
+----------+------------------+-----------+-------------+------------+--------------+
6 rows in set (0.001 sec)
```

ii)Rollback

```
MariaDB [railway_system]> update train_331 set t_type = 'mail' where t_type = 'post';
Query OK, 2 rows affected (0.000 sec)
Rows matched: 2  Changed: 2  Warnings: 0

MariaDB [railway_system]> select * from train_331;
+----------+------------------+-----------+-------------+-----------+--------------+
| Train_No | T_Name           | T_Type    | Destination | Arrival   | Availability |
+----------+------------------+-----------+-------------+-----------+--------------+
|    25260 | Chennai Mail     | mail      | Chennai     | Mangaluru | yes          |
|    25261 | Managaluru Mail  | mail      | Mangaluru   | Chennai   | yes          |
|    58450 | MAN-BEN Express  | Fast      | Bengaluru   | Mangaluru | yes          |
|    58451 | BEN-MAN Express  | Fast      | Mangaluru   | Bengaluru | yes          |
|    62620 | CHE-BEN Shatabdi | Superfast | Bengaluru   | Chennai   | no           |
|    62621 | BEN-CHE Shatabdi | Superfast | Chennai     | Bengaluru | yes          |
+----------+------------------+-----------+-------------+-----------+--------------+
6 rows in set (0.001 sec)

MariaDB [railway_system]> rollback to sp1;
Query OK, 0 rows affected (0.004 sec)

MariaDB [railway_system]> select * from train_331;
+----------+------------------+-----------+-------------+-----------+--------------+
| Train_No | T_Name           | T_Type    | Destination | Arrival   | Availability |
+----------+------------------+-----------+-------------+-----------+--------------+
|    25260 | Chennai Mail     | post      | Chennai     | Mangaluru | yes          |
|    25261 | Managaluru Mail  | post      | Mangaluru   | Chennai   | yes          |
|    58450 | MAN-BEN Express  | Fast      | Bengaluru   | Mangaluru | yes          |
|    58451 | BEN-MAN Express  | Fast      | Mangaluru   | Bengaluru | yes          |
|    62620 | CHE-BEN Shatabdi | Superfast | Bengaluru   | Chennai   | no           |
|    62621 | BEN-CHE Shatabdi | Superfast | Chennai     | Bengaluru | yes          |
+----------+------------------+-----------+-------------+-----------+--------------+
6 rows in set (0.001 sec)
```

iii) Commit

```
MariaDB [railway_system]> update train_331 set t_type = 'mail' where t_type = 'post';
Query OK, 2 rows affected (0.000 sec)
Rows matched: 2  Changed: 2  Warnings: 0

MariaDB [railway_system]> select * from train_331;
+----------+------------------+-----------+-------------+-----------+--------------+
| Train_No | T_Name           | T_Type    | Destination | Arrival   | Availability |
+----------+------------------+-----------+-------------+-----------+--------------+
|    25260 | Chennai Mail     | mail      | Chennai     | Mangaluru | yes          |
|    25261 | Managaluru Mail  | mail      | Mangaluru   | Chennai   | yes          |
|    58450 | MAN-BEN Express  | Fast      | Bengaluru   | Mangaluru | yes          |
|    58451 | BEN-MAN Express  | Fast      | Mangaluru   | Bengaluru | yes          |
|    62620 | CHE-BEN Shatabdi | Superfast | Bengaluru   | Chennai   | no           |
|    62621 | BEN-CHE Shatabdi | Superfast | Chennai     | Bengaluru | yes          |
+----------+------------------+-----------+-------------+-----------+--------------+
6 rows in set (0.001 sec)

MariaDB [railway_system]> commit;
Query OK, 0 rows affected (0.003 sec)
```

iv) Release

```
MariaDB [railway_system]> update compartment_331 set type = 'First Class' where type = 'I Class';
Query OK, 7 rows affected (0.004 sec)
Rows matched: 7  Changed: 7  Warnings: 0

MariaDB [railway_system]> savepoint sp1;
Query OK, 0 rows affected (0.000 sec)

MariaDB [railway_system]> release sp1;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB s
on for the right syntax to use near 'sp1' at line 1
MariaDB [railway_system]> release savepoint sp1;
Query OK, 0 rows affected (0.000 sec)

MariaDB [railway_system]> rollback to sp1;
ERROR 1305 (42000): SAVEPOINT sp1 does not exist
MariaDB [railway_system]>
```