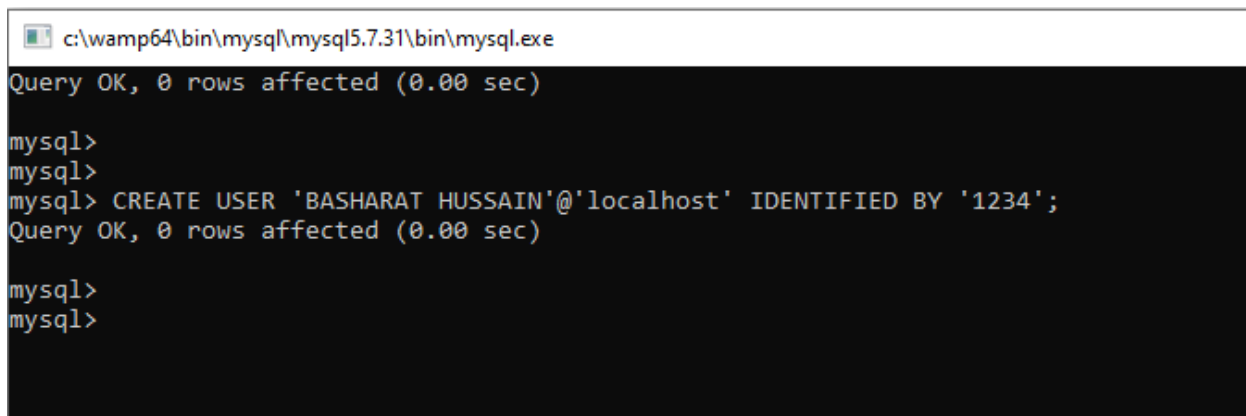# Lab Task #09

Name: Basharat Hussain

Roll no: P176102
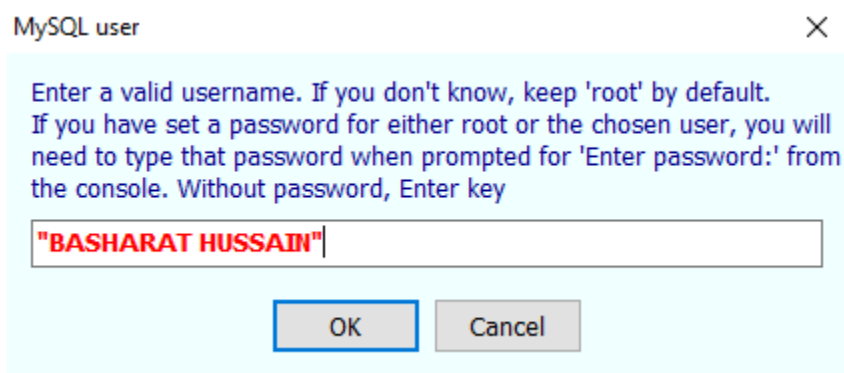
Instructor: Muhammad Usman

Exercises

1. **Create a user, user name should be your name.**


```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql>
mysql> CREATE USER 'BASHARAT HUSSAIN'@'localhost' IDENTIFIED BY '1234';
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql>
```


MySQL user   ✕

Enter a valid username. If you don't know, keep 'root' by default.
If you have set a password for either root or the chosen user, you will
need to type that password when prompted for 'Enter password:' from
the console. Without password, Enter key

"BASHARAT HUSSAIN"

OK   Cancel

c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

```
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 128
Server version: 5.7.31 MySQL Community Server (GPL)

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
+--------------------+
1 row in set (0.00 sec)

mysql>
```

2. Grants privileges to the user you created

- **To access tables from database bs_6b (at least 1).**


```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe                                    —    □

Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> CREATE User 'BASHARAT HUSSAIN'@'localhost'IDENTIFIED BY '1234';
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> GRANT ALL PRIVILEGES ON bs_6b.employee TO 'BASHARAT HUSSAIN'@'localhost'IDENTIFIED BY '1234';
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
mysql>
mysql>
```

		Host	Db	User	Table_name	Grantor	Timestamp	Table_priv	Column_pri
Copy	Delete	localhost	mysql	mysql.session	user	boot@connecting host	0000-00-00 00:00:00	Select	
Copy	Delete	localhost	sys	mysql.sys	sys_config	root@localhost	2021-03-20 17:36:10	Select	
Copy	Delete	localhost	bs_6b	basharat	employee	root@localhost	0000-00-00 00:00:00	Select	
Copy	Delete	localhost	bs_6b	BASHARAT HUSSAIN	employee	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete,Create,Drop,References...	
Copy	Delete	localhost	bank	khan	product	root@localhost	0000-00-00 00:00:00	Select,Insert,Update	
Copy	Delete	localhost	bank	P176102	acc_transaction	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete	
Copy	Delete	localhost	bank	P176102	account	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete	
Copy	Delete	localhost	bank	P176102	branch	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete	
Copy	Delete	localhost	bank	P176102	business	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete	

- **To access the views you have created in bs_6b (at least 1 view).**

Select c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

```
ERROR 1049 (42000): Unknown database 'database_name'
mysql> SHOW FULL TABLES IN BS_6B WHERE TABLE_TYPE LIKE 'VIEW';
+-----------------+------------+
| Tables_in_bs_6b | Table_type |
+-----------------+------------+
| emp_details     | VIEW       |
| tparkssold      | VIEW       |
+-----------------+------------+
2 rows in set (0.00 sec)
```

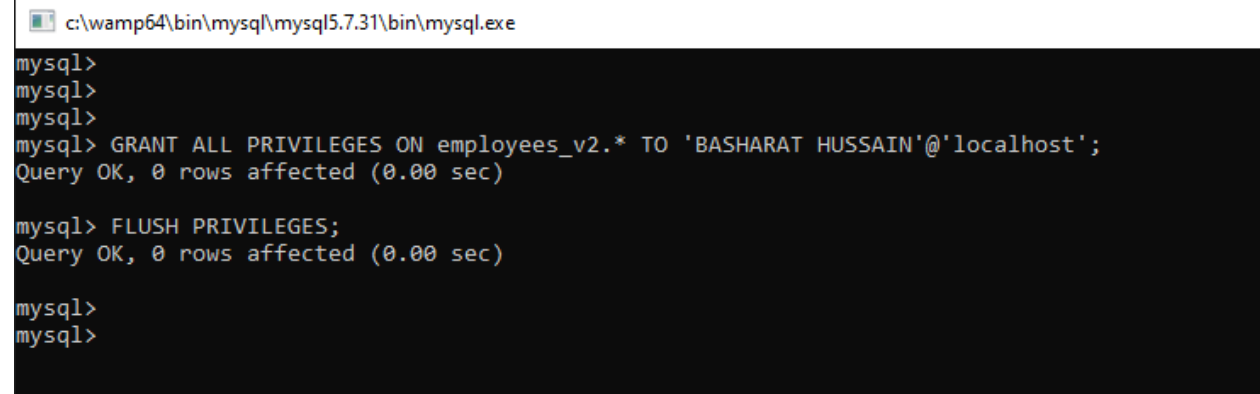c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe   — □

```
mysql>
mysql>
mysql>
mysql> GRANT ALL PRIVILEGES ON bs_6b.emp_details TO 'BASHARAT HUSSAIN'@'localhost'IDENTIFIED BY '1234';
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
```

	Edit				mysql.sys	sys_config	root@localhost	2021-03-20 17:36:10	Select
	Edit	Copy	Delete	localhost bs_6b	basharat	employee	root@localhost	0000-00-00 00:00:00	Select
	Edit	Copy	Delete	localhost bs_6b	BASHARAT HUSSAIN	emp_details	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete,Create,Drop,References...
	Edit	Copy	Delete	localhost bs_6b	BASHARAT HUSSAIN	employee	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete,Create,Drop,References...
	Edit	Copy	Delete	localhost bank	khan	product	root@localhost	0000-00-00 00:00:00	Select,Insert,Update
	Edit	Copy	Delete	localhost bank	P176102	acc_transaction	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete

To access full database of employee (which you have used in assignment 1)

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

mysql>
mysql>
mysql>
mysql> GRANT ALL PRIVILEGES ON employees_v2.* TO 'BASHARAT HUSSAIN'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql>
```

3. Revoke the right to access the view you granted in exercise 2.


```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe                                      —    □
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL
ver version for the right syntax to use near 'IDENTIFIED BY '1234'' at line 1
mysql>
mysql>
mysql> REVOKE ALL PRIVILEGES ON bs_6b.emp_details FROM 'BASHARAT HUSSAIN'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql>
```


			Host	DB	User	table_name	Grantor	Timestamp	Table_priv	
☐	Edit	Copy Delete	localhost	mysql	mysql.session	user	boot@connecting host	0000-00-00 00:00:00	Select	
☐	Edit	Copy Delete	localhost	sys	mysql.sys	sys_config	root@localhost	2021-03-20 17:36:10	Select	
☐	Edit	Copy Delete	localhost	bs_6b	basharat	employee	root@localhost	0000-00-00 00:00:00	Select	
☐	Edit	Copy Delete	localhost	bs_6b	BASHARAT HUSSAIN	employee	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete,Create,Drop,References...	
☐	Edit	Copy Delete	localhost	bank	khan	product	root@localhost	0000-00-00 00:00:00	Select,Insert,Update	
☐	Edit	Copy Delete	localhost	bank	P176102	acc_transaction	root@localhost	0000-00-00 00:00:00	Select,Insert,Update,Delete	

4. Grant the insert permission on table ticket and allow him to grant this permission to other users.

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

mysql>
mysql>
mysql>
mysql>
mysql> GRANT INSERT ON bs_6b.ticket TO 'BASHARAT HUSSAIN'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql>
```

+ Options

	Host	Db	User	Table_name	Grantor	Timestamp	Table_priv	Column_p
☐ 🖉 Edit 🗐 Copy ⊝ Delete	localhost	mysql	mysql.session	user	boot@connecting host	0000-00-00 00:00:00	Select	
☐ 🖉 Edit 🗐 Copy ⊝ Delete	localhost	sys	mysql.sys	sys_config	root@localhost	2021-03-20 17:36:10	Select	
☐ 🖉 Edit 🗐 Copy ⊝ Delete	localhost	bs_6b	basharat	employee	root@localhost	0000-00-00 00:00:00	Select	
☐ 🖉 Edit 🗐 Copy ⊝ Delete	localhost	bs_6b	BASHARAT HUSSAIN	employee	root@localhost	0000-00-00 00:00:00	Select,Insert	
☐ 🖉 Edit 🗐 Copy ⊝ Delete	localhost	bs_6b	BASHARAT HUSSAIN	ticket	root@localhost	0000-00-00 00:00:00	Insert	

↑ ☐ Check all   With selected: 🖉 Edit 🗐 Copy ⊝ Delete 📋 Export

5. Give a demonstration of commit, rollback and savepoint commands.

- **You can use any already define database for the demonstration of TCL commands.**

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

10 rows in set (0.00 sec)

mysql>
mysql>
mysql> use bs_6b;
Database changed
mysql>
mysql> show tables;
+----------------+
| Tables_in_bs_6b |
+----------------+
| attraction     |
| emp_details    |
| employee       |
| hours          |
| sales          |
| sales_line     |
| themepark      |
| ticket         |
| tparkssold     |
+----------------+
9 rows in set (0.00 sec)
```

```
mysql> select * from themepark;
+-----------+---------------+--------------+----------------+
| PARK_CODE | PARK_NAME     | PARK_CITY    | PARK_COUNTRY   |
+-----------+---------------+--------------+----------------+
| FR1001    | FairyLand     | PARIS        | FR             |
| NL1202    | Efling        | NOORD        | NL             |
| SP4533    | AdventurePort | BARCELONA    | SP             |
| SW2323    | Labyrinthe    | LAUSANNE     | SW             |
| UK2622    | MiniLand      | WINDSOR      | UK             |
| UK3452    | PleasureLand  | STOKE        | UK             |
| ZA1342    | GoldTown      | JOHANNESBURG | ZA             |
| PK1947    | TataraPark    | PESHAWAR     | PK             |
+-----------+---------------+--------------+----------------+
8 rows in set (0.00 sec)
```

- **Disable the autocommit option as shown in lab manual.**

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> set autocommit=0;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

- **Insert some data in any table, update some data in any table**
  Insertion:

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

12 rows in set (0.02 sec)

mysql>
mysql> insert into themepark values('asa111','sddswe','paddfds','pk');
Query OK, 1 row affected (0.00 sec)

mysql> select * from themepark;
+-----------+---------------+--------------+--------------+
| PARK_CODE | PARK_NAME     | PARK_CITY    | PARK_COUNTRY |
+-----------+---------------+--------------+--------------+
| FR1001    | FairyLand     | london       | FR           |
| NL1202    | Efling        | NOORD        | NL           |
| SP4533    | AdventurePort | BARCELONA    | SP           |
| SW2323    | Labyrinthe    | LAUSANNE     | SW           |
| UK2622    | MiniLand      | WINDSOR      | UK           |
| UK3452    | PleasureLand  | STOKE        | UK           |
| ZA1342    | GoldTown      | JOHANNESBURG | ZA           |
| GB1234    | CityPark      | GilGit       | PK           |
| CD123     | Asdfg         | Karachi      | PK           |
| KPK123    | BageNaran     | Peshawar     | PK           |
| EF123     | Zxcvb         | Lahore       | PK           |
| AB1234    | F-9Park       | Islamabad    | PK           |
| asa111    | sddswe        | paddfds      | pk           |
+-----------+---------------+--------------+--------------+
13 rows in set (0.00 sec)

mysql>
```

Update:

```
c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

mysql>
mysql>
mysql> update themepark set park_city="lahore" where  park_code = "AB1234";
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from themepark;
+-----------+---------------+--------------+---------------+
| PARK_CODE | PARK_NAME     | PARK_CITY    | PARK_COUNTRY  |
+-----------+---------------+--------------+---------------+
| FR1001    | FairyLand     | london       | FR            |
| NL1202    | Efling        | NOORD        | NL            |
| SP4533    | AdventurePort | BARCELONA    | SP            |
| SW2323    | Labyrinthe    | LAUSANNE     | SW            |
| UK2622    | MiniLand      | WINDSOR      | UK            |
| UK3452    | PleasureLand  | STOKE        | UK            |
| ZA1342    | GoldTown      | JOHANNESBURG | ZA            |
| GB1234    | CityPark      | GilGit       | PK            |
| CD123     | Asdfg         | Karachi      | PK            |
| KPK123    | BageNaran     | Peshawar     | PK            |
| EF123     | Zxcvb         | Lahore       | PK            |
| AB1234    | F-9Park       | lahore       | PK            |
| asa111    | sddswe        | paddfds      | pk            |
+-----------+---------------+--------------+---------------+
13 rows in set (0.00 sec)

mysql>
```

- **Now apply rollback and see the result**

```
 c:\wamp64\bin\mysql\mysql5.7.31\bin\mysql.exe

mysql>
mysql>
mysql> ROLLBACK;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> select * from themepark;
+-----------+---------------+--------------+--------------+
| PARK_CODE | PARK_NAME     | PARK_CITY    | PARK_COUNTRY |
+-----------+---------------+--------------+--------------+
| FR1001    | FairyLand     | london       | FR           |
| NL1202    | Efling        | NOORD        | NL           |
| SP4533    | AdventurePort | BARCELONA    | SP           |
| SW2323    | Labyrinthe    | LAUSANNE     | SW           |
| UK2622    | MiniLand      | WINDSOR      | UK           |
| UK3452    | PleasureLand  | STOKE        | UK           |
| ZA1342    | GoldTown      | JOHANNESBURG | ZA           |
| GB1234    | CityPark      | GilGit       | PK           |
| CD123     | Asdfg         | Karachi      | PK           |
| KPK123    | BageNaran     | Peshawar     | PK           |
| EF123     | Zxcvb         | Lahore       | PK           |
| AB1234    | F-9Park       | lahore       | PK           |
| asa111    | sddswe        | paddfds      | pk           |
+-----------+---------------+--------------+--------------+
13 rows in set (0.00 sec)

mysql>
```

- **Do some more transactions of insert, update and delete. Afterwards add a savepoint.**

```
mysql>
mysql>
mysql> insert into themepark values('AB1234','F-9Park','Islamabad','PK');
Query OK, 1 row affected (0.00 sec)

mysql> update themepark set park_city="GilGit" where park_code = "GB1234";
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> DElETE from themepark Where park_code = "PK1947";
Query OK, 1 row affected (0.03 sec)

mysql> SAVEPOINT s1;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from themepark;
+-----------+---------------+--------------+--------------+
| PARK_CODE | PARK_NAME     | PARK_CITY    | PARK_COUNTRY |
+-----------+---------------+--------------+--------------+
| FR1001    | FairyLand     | london       | FR           |
| NL1202    | Efling        | NOORD        | NL           |
| SP4533    | AdventurePort | BARCELONA    | SP           |
| SW2323    | Labyrinthe    | LAUSANNE     | SW           |
| UK2622    | MiniLand      | WINDSOR      | UK           |
| UK3452    | PleasureLand  | STOKE        | UK           |
| ZA1342    | GoldTown      | JOHANNESBURG | ZA           |
| GB1234    | CityPark      | GilGit       | PK           |
| KPK123    | BageNaran     | Peshawar     | PK           |
| AB1234    | F-9Park       | Islamabad    | PK           |
+-----------+---------------+--------------+--------------+
10 rows in set (0.00 sec)

mysql>
```

- **Insert 2 to 3 rows and then go back to previous savepoint and see the results.**

```
10 rows in set (0.00 sec)

mysql>
mysql>
mysql> insert into themepark values('CD123','Asdfg','Karachi','PK');
Query OK, 1 row affected (0.00 sec)

mysql> insert into themepark values('EF123','Zxcvb','Lahore','PK');
Query OK, 1 row affected (0.00 sec)

mysql> SAVEPOINT s2;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from themepark;
+-----------+--------------+--------------+--------------+
| PARK_CODE | PARK_NAME    | PARK_CITY    | PARK_COUNTRY |
+-----------+--------------+--------------+--------------+
| FR1001    | FairyLand    | london       | FR           |
| NL1202    | Efling       | NOORD        | NL           |
| SP4533    | AdventurePort| BARCELONA    | SP           |
| SW2323    | Labyrinthe   | LAUSANNE     | SW           |
| UK2622    | MiniLand     | WINDSOR      | UK           |
| UK3452    | PleasureLand | STOKE        | UK           |
| ZA1342    | GoldTown     | JOHANNESBURG | ZA           |
| GB1234    | CityPark     | GilGit       | PK           |
| CD123     | Asdfg        | Karachi      | PK           |
| KPK123    | BageNaran    | Peshawar     | PK           |
| EF123     | Zxcvb        | Lahore       | PK           |
| AB1234    | F-9Park      | Islamabad    | PK           |
+-----------+--------------+--------------+--------------+
12 rows in set (0.00 sec)
```