

COVER PAGE

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The User Guide

1)Connect your database, make tables and insert values to them

Step1.1: Connect to sql using
command `mysql -u <username> -p`

Step1.2: It will tell you to enter
your password, do so. Then you are
connected.

Step1.3: Choose a database, in
this case the database is final

Type command `USE <database name>`
you should see Database changed

Step1.4: SOURCE the files that
create tables and insert values to
them using command `SOURCE`
`<filename.sql>`. Once you do these
sql will show you these outputs if
it's successful

```
mysql> SOURCE createTables.sql
Query OK, 0 rows affected, 1 warning (0.01 sec)

Query OK, 0 rows affected, 1 warning (0.10 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected, 3 warnings (0.10 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected, 1 warning (0.06 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected (0.06 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected (0.07 sec)

Query OK, 0 rows affected, 1 warning (0.01 sec)

Query OK, 0 rows affected, 1 warning (0.06 sec)
```

```
mysql> SOURCE insertValues.sql
Query OK, 10 rows affected (0.02 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

Step1.5: Once the tables are made use command `SHOW TABLES;` & then `DESC <tablename>` to view information on any of the tables

Step6: To see tables with columns type command `SELECT * FROM <tablename>`

--MARKS END OF MAKING TABLES AND INSERTING VALUES--

2)Query database and use example Queries

Step2.1: Now you can query the data to find the values you are looking for some example queries are given in questions1.sql, below are some examples on how to run them and what the outputs would look like.

```
mysql> SELECT COUNT(GrandPrix) AS totalRaces
-> FROM Races;
+-----+
| totalRaces |
+-----+
|          21 |
+-----+
1 row in set (0.14 sec)
```

```
mysql> SELECT DName,DNumber
-> FROM Drivers
-> WHERE TName LIKE '%Ferrari%';
+-----+-----+
| DName          | DNumber |
+-----+-----+
| Sebastian Vettel |        5 |
| Charles Leclerc  |       16 |
+-----+-----+
2 rows in set (0.01 sec)
```

--MARKS END OF QUERYING DATA--

3)Using the Advanced features:

Step3.1: There are some procedures that help you add new values to certain tables their usage is

simple the procedures are in a file

To source them type SOURCE <filename> once you source is you can type

Step3.2: SHOW PROCEDURE STATUS
WHERE Db = 'final';

This command will show you the procedures. You can use command CALL <insertprocedureName>.It will show the following output if it works.

```
mysql> CALL insNewTeam('Range Rover','Range Rover','C34',0);  
Query OK, 1 row affected (0.01 sec)
```

Step3.3: The other procedure can be called in the following way:

```
mysql> CALL findTotalRaces(@result);  
+-----+  
| COUNT(GrandPrix) |  
+-----+  
|                21 |  
+-----+  
1 row in set (0.04 sec)  
  
Query OK, 0 rows affected (0.04 sec)
```

Step3.4: The file also contains triggers. SOURCE the file

containing triggers by command
SOURCE <filename.sql>

To see the triggers commented use
command SHOW TRIGGERS;

Step3.5: Triggers will work at
their own paces for example the
one showing error message will
display for example

```
mysql> UPDATE Drivers  
-> SET points = 22  
-> WHERE DName = 'Lewis Hamilton';  
ERROR 1644 (45000): The new points 22 cannot be lesser than 3431  
mysql>
```

The other trigger will work in the
same way upon deleting, it will
delete value from the other file
as well.

Step3.6: There is a file
containing view virtual temporary
tables source the views using
command SOURCE <filename.sql>
after sourcing run command SHOW
TABLES;

```
mysql> SOURCE view1.sql
Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
+-----+
| Tables_in_final |
+-----+
| Drivers          |
| ParticipatesIn   |
| Races            |
| Team             |
| Tracks           |
| Winner           |
| best_drivers     |
| winningStreak    |
+-----+
8 rows in set (0.00 sec)
```

The view tables will appear with their names you can use them in the same way you use tables `SELECT * FROM <viewname>`

Step3.7: You can query the views too using suitable commands

Step3.8: Before you move to python exit the database using command `exit`, the output `Bye` would show indicating you are out.

--MARKS END OF ADVANCED FEATURES--

4)Using python:

Step4.1: Additionally, there is a python file connected to the database

Run it using command `python3 <filename.py>`

Step4.2: Choose a suitable option and display table of your choice

→Important bits

1)Don't use `<>` just write the filenames example `SOURCE insertTables.sql`

2)If you are querying end all commands with a `;`

3)Make sure to not delete something until and unless it is absolutely required

4)When all things are successfully sourced you shall see a message if you see an error message something is probably wrong.

