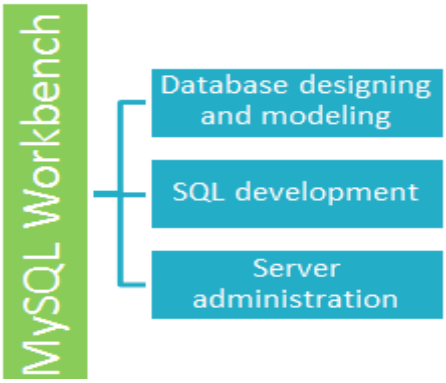
MySQL Workbench Installation - Linux

Introduction

MySQL Workbench is a graphical user interface tool used for the MySQL database management. MySQL Workbench provides various features in which visual SQL development, connection management, database migration, visual DB administration, and data modelling are included. MySQL Workbench provides the details of each physical schema in a separate tab. A new model includes an initial schema named mydb by default. You can start working with this schema (add or edit table, view, and group objects) or create additional schemas in the model. When you save a new model, MySQL Workbench creates an icon in the models view of the home screen tab. Each model icon shows the model name, schema name, and the location of the model file (models use the .mwb extension). The purpose of MySQL workbench is to provide the interface to work with databases more easily and in a more structured way.



You can install MySQL workbench using the following two ways:

1.Using the apt repository
2.Install MySQL workbench using Deb packages

Step 1

Search for Ubuntu Software

Click on development.

Search for workbench

Select Mysql Workbench Community and click installation

Type in the admin password to allow permissions.

Log on to Mysql and create a database and user. Add permissions to the new user using the following commands.

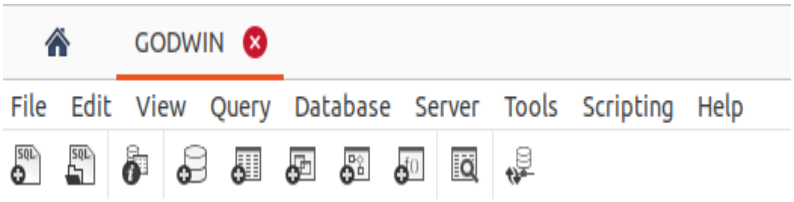
There are two ways to create a database schema using mysql

Option 1

1.Open Mysql workbench and click on the + sign

2.Assign a connection name. Open the connectionserver. You will be prompted for a password.

3, Below the menu bar click on the following icon  and assign a database name on the schema editor. Click apply at the bottom.



Option 2

We will start by creating a database in the root using command line (SQL statements) and then connect to our schema.

CREATING A DATABASE USING MYSQL WORKBENCH

```
mysql> CREATE database db_connect;

mysql> use db_connect;
Query OK, 0 rows affected (0.01 sec)

mysql> CREATE user 'lifechoices'@'localhost' identified by 'lifechoices123';
Query OK, 0 rows affected (0.01 sec)

mysql> GRANT ALL privileges on db_connect.* to 'lifechoices'@'localhost';
Query OK, 0 rows affected (0.01 sec)


mysql> exit
Bye
```

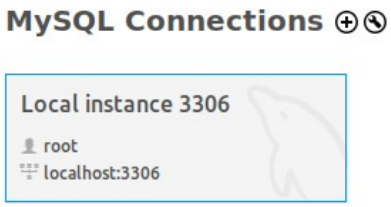
Open the workbench and do the following

If there is an error in permissions open MYSQL WORKBENCH COMMUNITY from UBUNTU SOFTWARE and add permissions OR

```
$ sudo snap connect mysql-workbench-community:password-manager-
service :password-manager-service
```

Try connect again and you will see the following screen. You can also connect to root account and reset the new user password under User and Privileges option.
Just below the menu, click on the 5th button to create a new table.

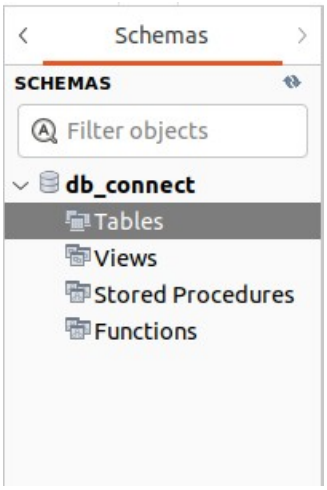
Try connect again and you will see the Welcome to MySQL Workbench screen.
Look for the following screen and click the + sign



You can also connect to root account and reset the new user password under User and Privileges option.
Just below the menu, click on the 5th button to create a new table.

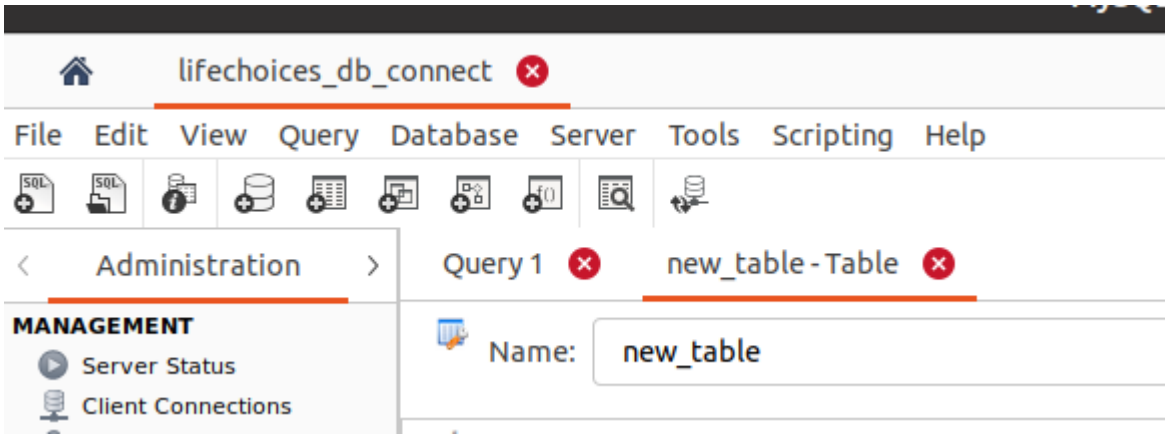
Navigate to schemas and you will be able to see the current schema in our case its db_connect.

If you would like to create a table- right click on the table tab. See screenshot below.



To assign the table name type in the new name. You are able to type in the different field names and assign different data types on the screen represented by the below screenshot. Add the following fields

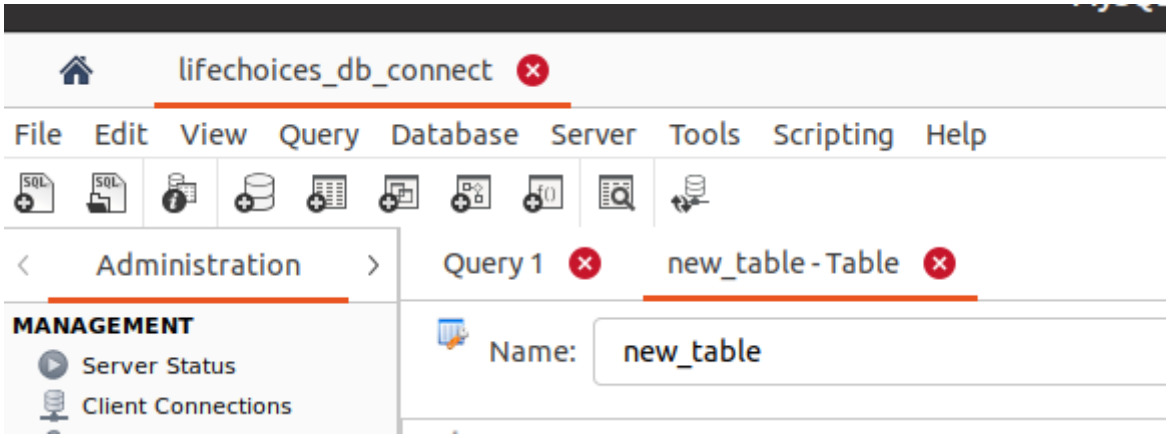
Fieldname	Datatype
stud_id	INT (NN), PK
Firstname	varchar(20)
Surname	varchar(20)
Address	varchar(20)
Marital Status	Boolean



After closing the table and clicking on save- you will see a corresponding SQL code created for the table you just created. In our case its

```
CREATE TABLE `db_connect`.`students` (
`stud_id` INT NOT NULL,
  `firstname` VARCHAR(20) NOT NULL,
  `surname` VARCHAR(20) NOT NULL,
  `Address` VARCHAR(20) NULL,
  `Marital_status` TINYINT NOT NULL,
  PRIMARY KEY (`stud_id`));
```

Rename table name and add the columns names, data types and other attributes at any given time.



Rename table name and add the columns names, data types and other attributes.

If you want to see if the table has been created- check in the command line by typing the following:

> mysql -u lifechoices -p

Type in the password for the user lifechoices123

mysql> show databases;

```
+--------------------+
| Database           |
+--------------------+
| db_connect         |
| information_schema |
+--------------------+
2 rows in set (0.00 sec)
```

mysql> use db_connect;
Database changed
mysql> show tables;

You will see the following table and its attributes (columns/fields)

```
+----------------------+
| Tables_in_db_connect |
+----------------------+
| students             |
+----------------------+
1 row in set (0.01 sec)
```

Check for field names by typing the following
mysql> describe students;
The output will be as follows:

```
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| stud_id        | int         | NO   | PRI | NULL    |       |
| firstname      | varchar(20) | NO   |     | NULL    |       |
| surname        | varchar(20) | NO   |     | NULL    |       |
| Address        | varchar(20) | YES  |     | NULL    |       |
| Marital_status | tinyint     | NO   |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

Dropping schemas or dropping tables through the workbench is quite easy. You simply have to right-click the schema or the table and select drop option. We will repeat this using command line.

Exercise

Create a schema called EMPREWARD with two tables called Employees and Reward as shown below.

Employee table

Employee_id	First_name	Last_name	Salary	Joining_date	Departement
1	Bob	Kinto	1000000	2019-01-20	Finance
2	Jerry	Kansxo	6000000	2019-01-15	IT
3	Philip	Jose	8900000	2019-02-05	Banking
4	John	Abraham	2000000	2019-02-25	Insurance
5	Michael	Mathew	2200000	2019-02-28	Finance
6	Alex	chreketo	4000000	2019-05-10	IT
7	Yohan	Soso	1230000	2019-06-20	Banking

Reward table

Employee_ref_id	date_reward	amount
1	2019-05-11	1000
2	2019-02-15	5000
3	2019-04-22	2000
1	2019-06-20	8000