



Mysql – configuration

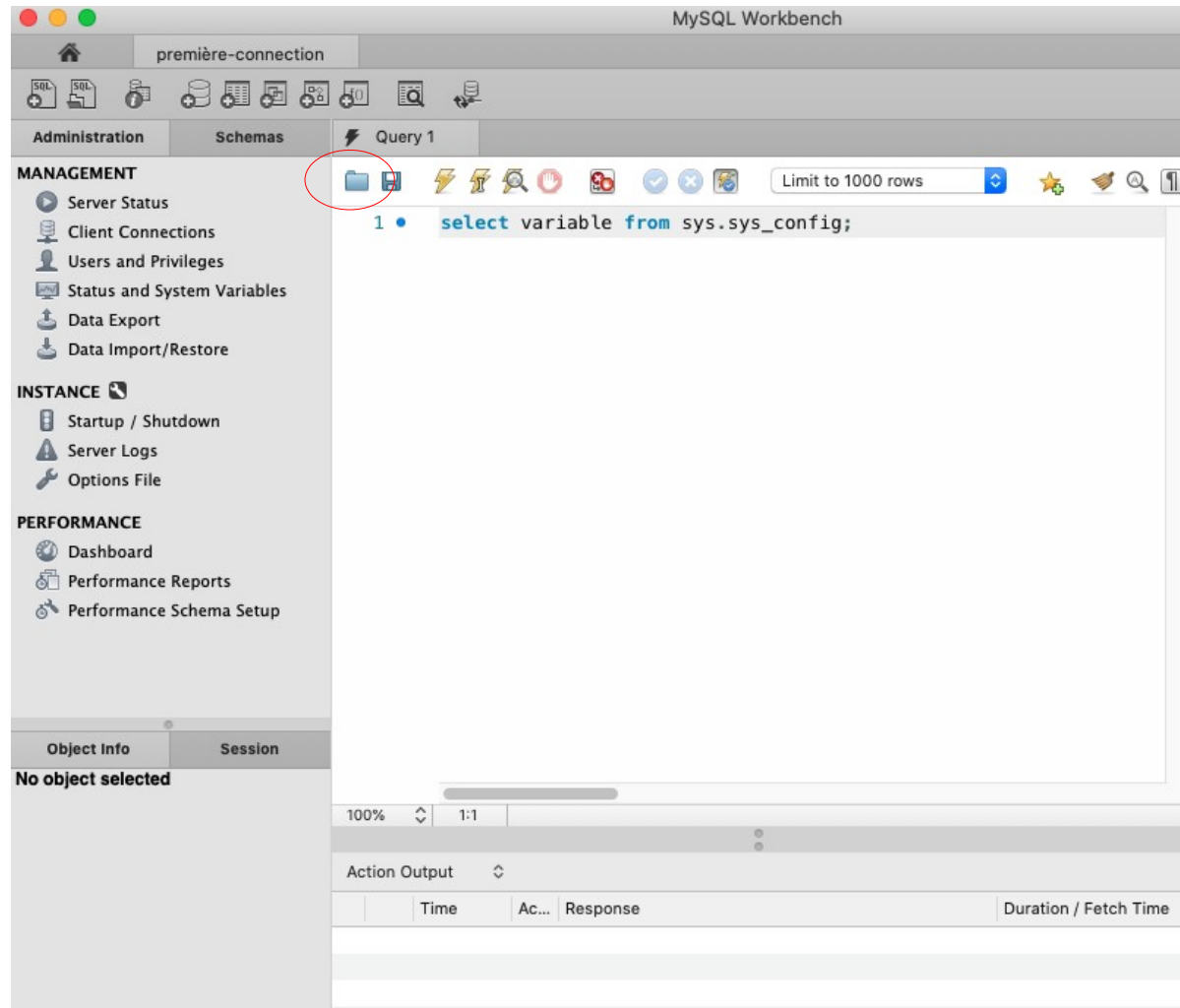
MySQL – créer un utilisateur

Nous devons créer un utilisateur de MySQL

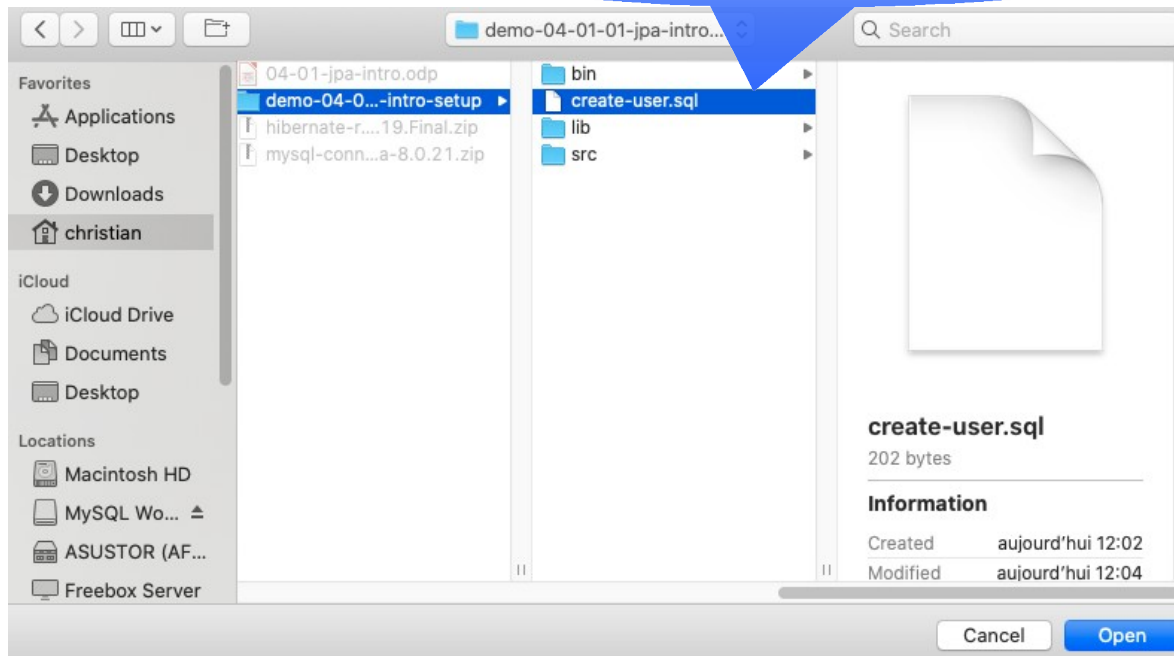
- A la racine de votre projet par exemple, créez un fichier create-user.sql
- placez -y le contenu suivant :

```
CREATE USER 'padawan'@'localhost' IDENTIFIED BY 'padawan';  
  
GRANT ALL PRIVILEGES ON * . * TO 'padawan'@'localhost';  
  
ALTER USER 'padawan'@'localhost' IDENTIFIED WITH  
mysql_native_password BY 'padawan';
```

Executer ce script dans MySQL Workbench



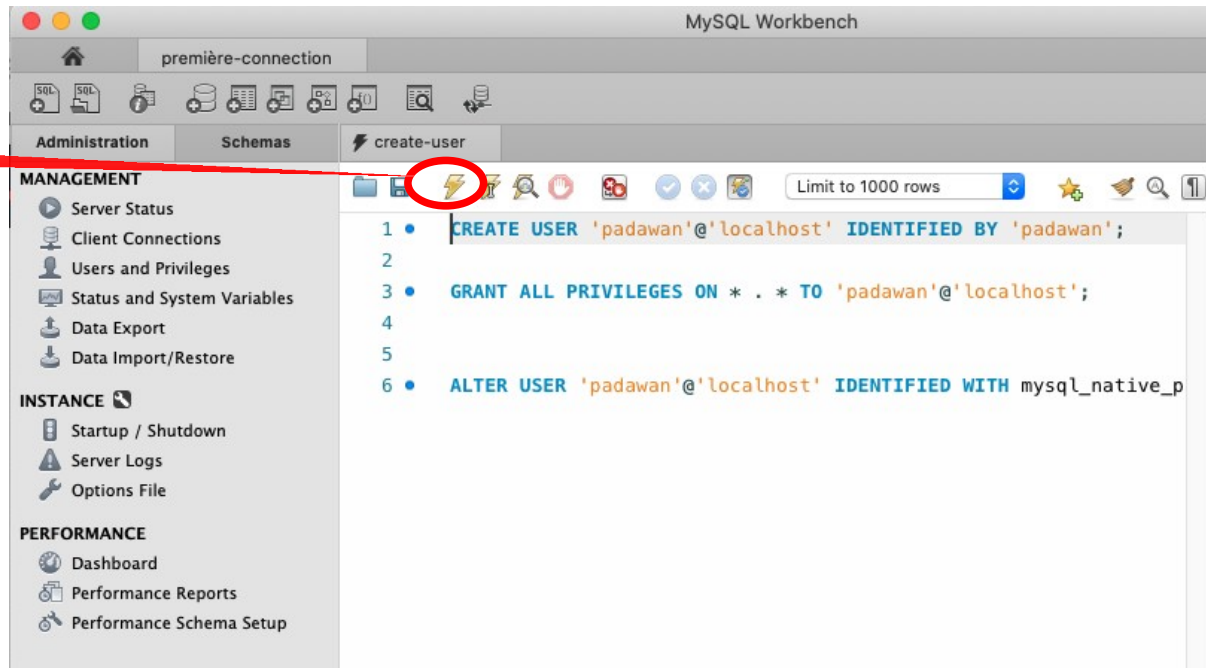
Naviguez jusqu'au fichier .sql



Ouvrez-le!

1

Exécutez le script



2

2. Fermez la connection

The screenshot shows the MySQL Workbench interface. The left sidebar contains navigation options under 'MANAGEMENT' (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), 'INSTANCE' (Startup / Shutdown, Server Logs, Options File), and 'PERFORMANCE' (Dashboard, Performance Reports, Performance Schema Setup). The main window displays three SQL queries:

- 1 • `CREATE USER 'padawan'@'localhost' IDENTIFIED BY 'padawan';`
- 2
- 3 • `GRANT ALL PRIVILEGES ON * . * TO 'padawan'@'localhost';`
- 4
- 5
- 6 • `ALTER USER 'padawan'@'localhost' IDENTIFIED WITH mysql_native_p`

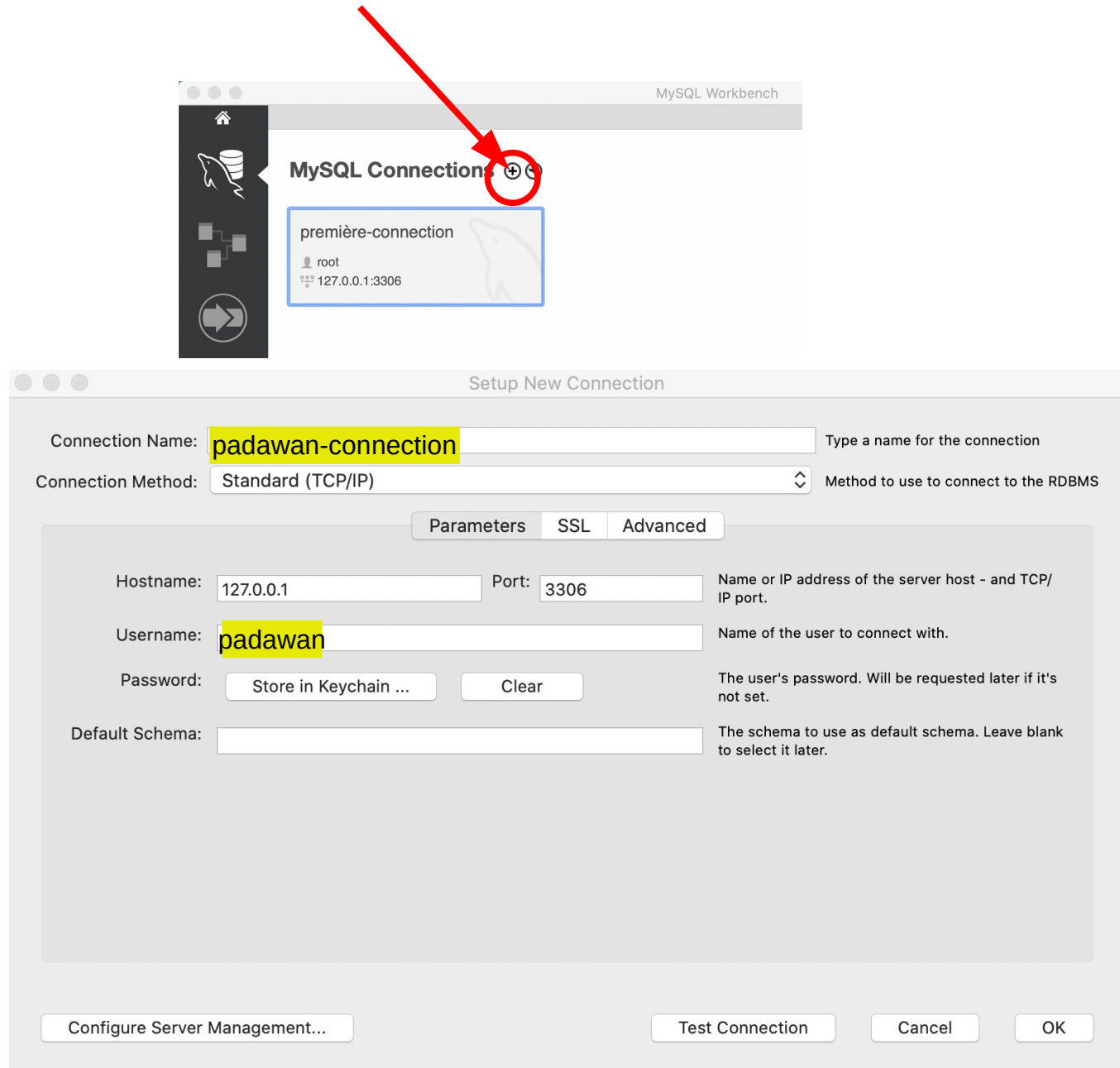
The 'Action Output' tab at the bottom shows the results of the executed queries:

	Time	Ac...	Response	Duration / Fetch Time
✓ 1	12:18:56	CR...	0 row(s) affected	0.011 sec
✓ 2	12:18:56	GR...	0 row(s) affected	0.0020 sec
✓ 3	12:18:56	AL...	0 row(s) affected	0.0012 sec

Below the table, it says 'Query Completed'.

1. Vérifier le résultat

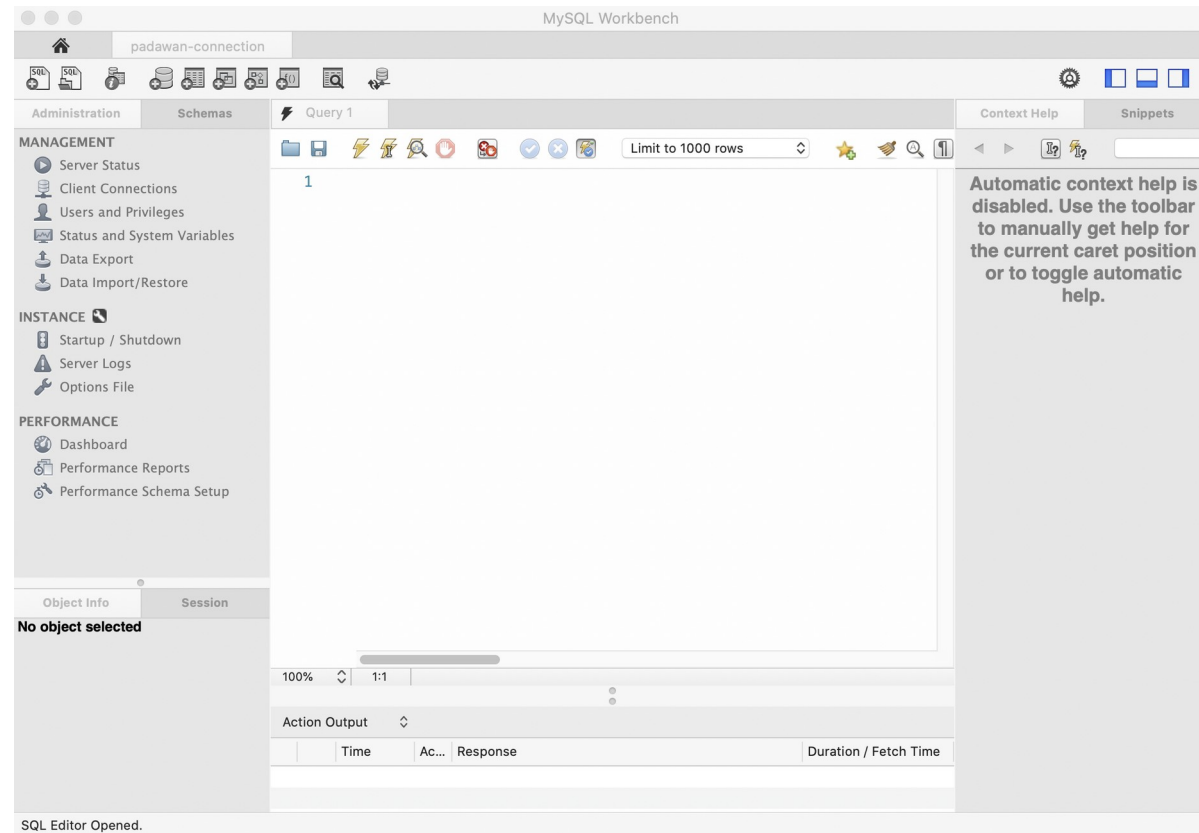
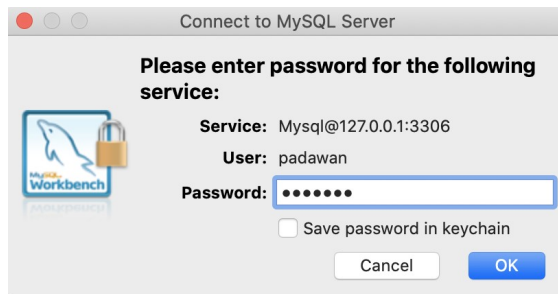
Configurer une nouvelle connexion



Tester la connexion



OK la connexion fonctionne !



On va utiliser cette connexion dorénavant pour des raisons de sécurité des accès à la BDD et pour simuler des conditions d'utilisation professionnelles

Mysql – vérifier les droits utilisateur

- On s'est connecté à MySQL comme l'utilisateur "padawan". Celui-ci doit pouvoir créer une database.

CF : GRANT ALL PRIVILEGES ON * . * TO 'padawan'@'localhost';

- Vérifier que l'utilisateur "padawan" possède tous les droits nécessaires sur le SGBD.
- Nous , en tant que "padawan" , allons créer une database et des tables à l'intérieur.

Mysql – vérifier les droits utilisateur

The screenshot shows the MySQL Workbench interface with the 'Administration - Users and Privileges' tab selected. The 'Users and Privileges' section is active, displaying a list of user accounts. The 'padawan' user is selected, and the 'Details for account padawan@localhost' window is open. The 'Administrative Roles' tab is selected, showing a list of roles and their descriptions. A red arrow points to the 'GRANT OPTION' checkbox in the 'Global Privileges' list.

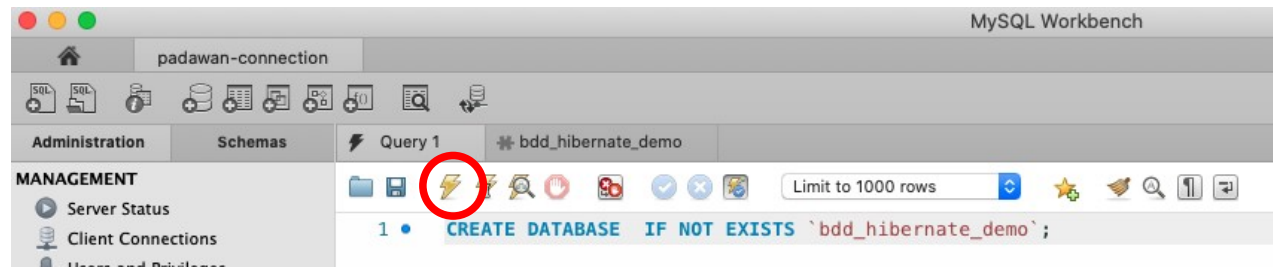
User	From Host
mysql.infoschema	localhost
mysql.session	localhost
mysql.sys	localhost
padawan	localhost
root	localhost

Role	Description
<input type="checkbox"/> DBA	grants the rights to perform all tasks
<input checked="" type="checkbox"/> MaintenanceAdmin	grants rights needed to maintain server
<input checked="" type="checkbox"/> ProcessAdmin	rights needed to assess, monitor, and kill any u...
<input checked="" type="checkbox"/> UserAdmin	grants rights to create users logins and reset p...
<input type="checkbox"/> SecurityAdmin	rights to manage logins and grant and revoke s...
<input checked="" type="checkbox"/> MonitorAdmin	minimum set of rights needed to monitor server
<input type="checkbox"/> DBManager	grants full rights on all databases
<input checked="" type="checkbox"/> DBDesigner	rights to create and reverse engineer any data...
<input checked="" type="checkbox"/> ReplicationAdmin	rights needed to setup and manage replication
<input checked="" type="checkbox"/> BackupAdmin	minimal rights needed to backup any database
<input checked="" type="checkbox"/> Custom	custom role

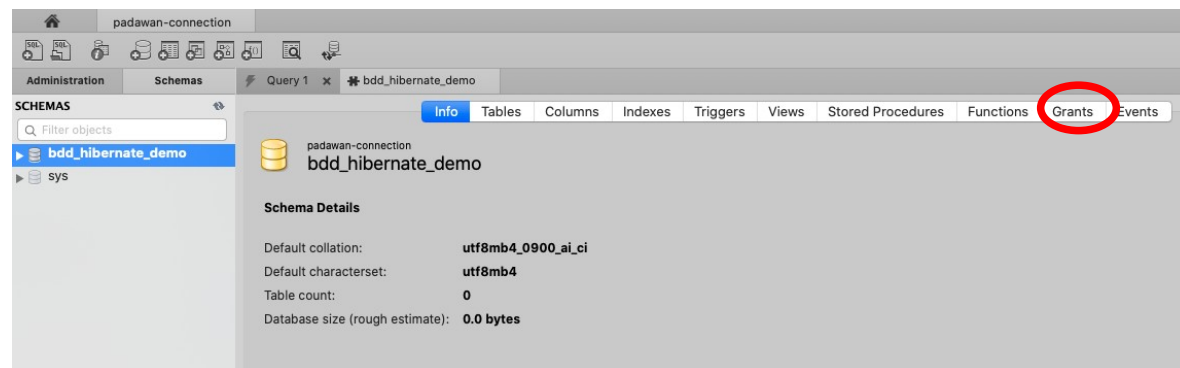
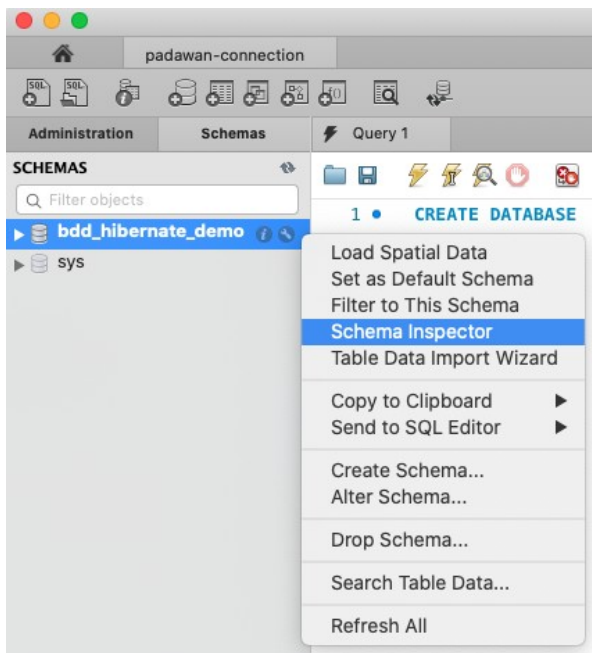
Global Privileges
<input checked="" type="checkbox"/> ALTER
<input checked="" type="checkbox"/> ALTER ROUTINE
<input checked="" type="checkbox"/> CREATE
<input checked="" type="checkbox"/> CREATE ROUTINE
<input checked="" type="checkbox"/> CREATE TABLESPACE
<input checked="" type="checkbox"/> CREATE TEMPORARY TAB...
<input checked="" type="checkbox"/> CREATE USER
<input checked="" type="checkbox"/> CREATE VIEW
<input checked="" type="checkbox"/> DELETE
<input checked="" type="checkbox"/> DROP
<input checked="" type="checkbox"/> EVENT
<input checked="" type="checkbox"/> EXECUTE
<input checked="" type="checkbox"/> FILE
<input type="checkbox"/> GRANT OPTION
<input checked="" type="checkbox"/> INDEX
<input checked="" type="checkbox"/> INSERT

Vérifiez la création de database

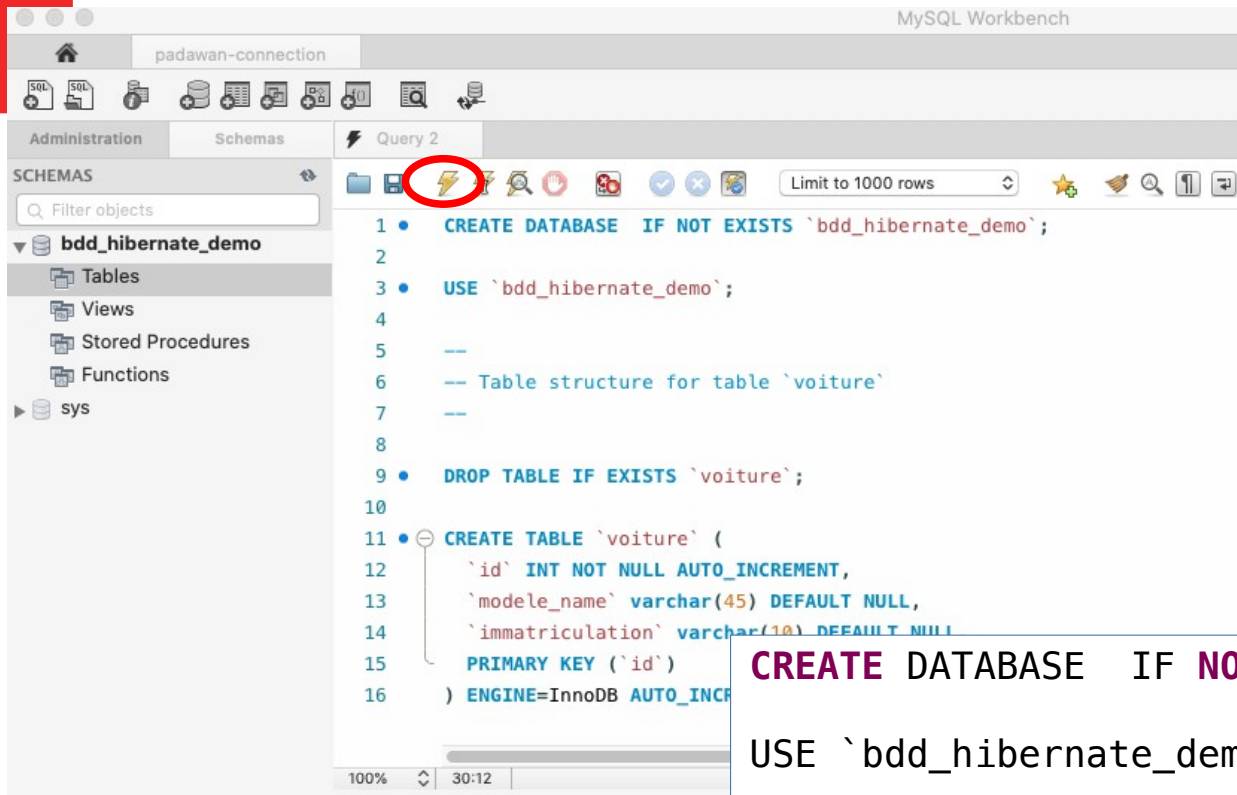
Dans l'onglet query on exécute un script de création de base de données.



Dans l'onglet schemas (pensez à rafraichir  si vous ne voyez pas la nouvelle base).
Ensuite : clic droit sur `bdd_hibernate_demo` > Schema inspector



Créer un script de création de database et de la table voiture



create-db-table.sql

```
CREATE DATABASE IF NOT EXISTS `bdd_hibernate_demo`;  
  
USE `bdd_hibernate_demo`;  
  
--  
-- Table structure for table `voiture`  
--  
  
DROP TABLE IF EXISTS `voiture`;  
  
CREATE TABLE `voiture` (  
  `id` INT NOT NULL AUTO_INCREMENT,  
  `modele_name` varchar(45) DEFAULT NULL,  
  `immatriculation` varchar(10) DEFAULT NULL,  
  PRIMARY KEY (`id`)  
) ENGINE=InnoDB AUTO_INCREMENT=1 DEFAULT CHARSET=latin1;
```

debug

MySQL Workbench

padawan-connection

Administration Schemas Query 2

Limit to 1000 rows

SCHEMAS

Filter objects

bdd_hibernate_demo

Tables Views Stored Procedures Functions sys

```
1 • CREATE DATABASE IF NOT EXISTS `bdd_hibernate_demo`;  
2  
3 • USE `bdd_hibernate_demo`;  
4  
5 --  
6 -- Table structure for table `voiture`  
7 --  
8  
9 • DROP TABLE IF EXISTS `voiture`;  
10  
11 • CREATE TABLE `voiture` (  
12   `id` int(11) NOT NULL AUTO_INCREMENT,  
13   `modele_name` varchar(45) DEFAULT NULL,  
14   `immatriculation` varchar(10) DEFAULT NULL,  
15   PRIMARY KEY (`id`)  
16 ) ENGINE=InnoDB AUTO_INCREMENT=1 DEFAULT CHARSET=latin1;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Object Info Session

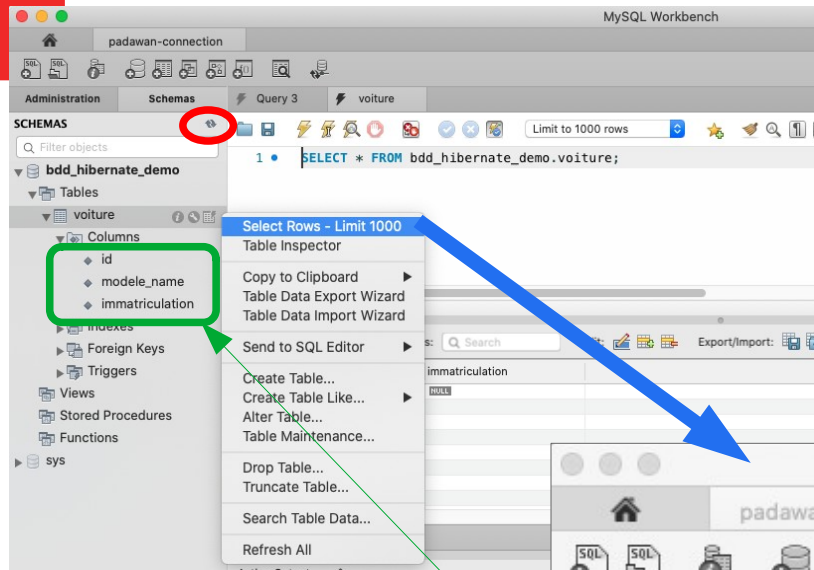
Schema: bdd_hibernate_demo

	Time	Action	Response	Duration / Fetch Time
2	13:32:45	CREATE DATABASE IF NOT EXISTS `bdd_hibernate_demo`	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00078 sec
3	13:32:45	USE `bdd_hibernate_demo`	0 row(s) affected	0.00020 sec
4	13:32:45	DROP TABLE IF EXISTS `voiture`	0 row(s) affected, 1 warning(s): 1051 Unknown table '...	0.0011 sec
5	13:32:45	CREATE TABLE `voiture` (`id` int(11) NOT NULL AUTO_INCREMENT, `mod...	0 row(s) affected, 1 warning(s): 1681 Integer display...	0.0069 sec
6	13:34:44	CREATE DATABASE IF NOT EXISTS `bdd_hibernate_demo`	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.00057 sec
7	13:34:44	USE `bdd_hibernate_demo`	0 row(s) affected	0.00025 sec
8	13:34:44	DROP TABLE IF EXISTS `voiture`	0 row(s) affected	0.0047 sec
9	13:34:44	CREATE TABLE `voiture` (`id` INT(11) NOT NULL AUTO_INCREMENT, `mod...	0 row(s) affected, 1 warning(s): 1681 Integer display...	0.0000 sec
10	13:36:49	CREATE DATABASE IF NOT EXISTS `bdd_hibernate_demo`	1 row(s) affected, 1 warning(s): 1007 Can't create dat...	0.0000 sec
11	13:36:49	USE `bdd_hibernate_demo`	0 row(s) affected	0.0000 sec
12	13:36:49	DROP TABLE IF EXISTS `voiture`	0 row(s) affected	0.0000 sec
13	13:36:49	CREATE TABLE `voiture` (`id` INT NOT NULL AUTO_INCREMENT, `modele...	0 row(s) affected	0.0000 sec

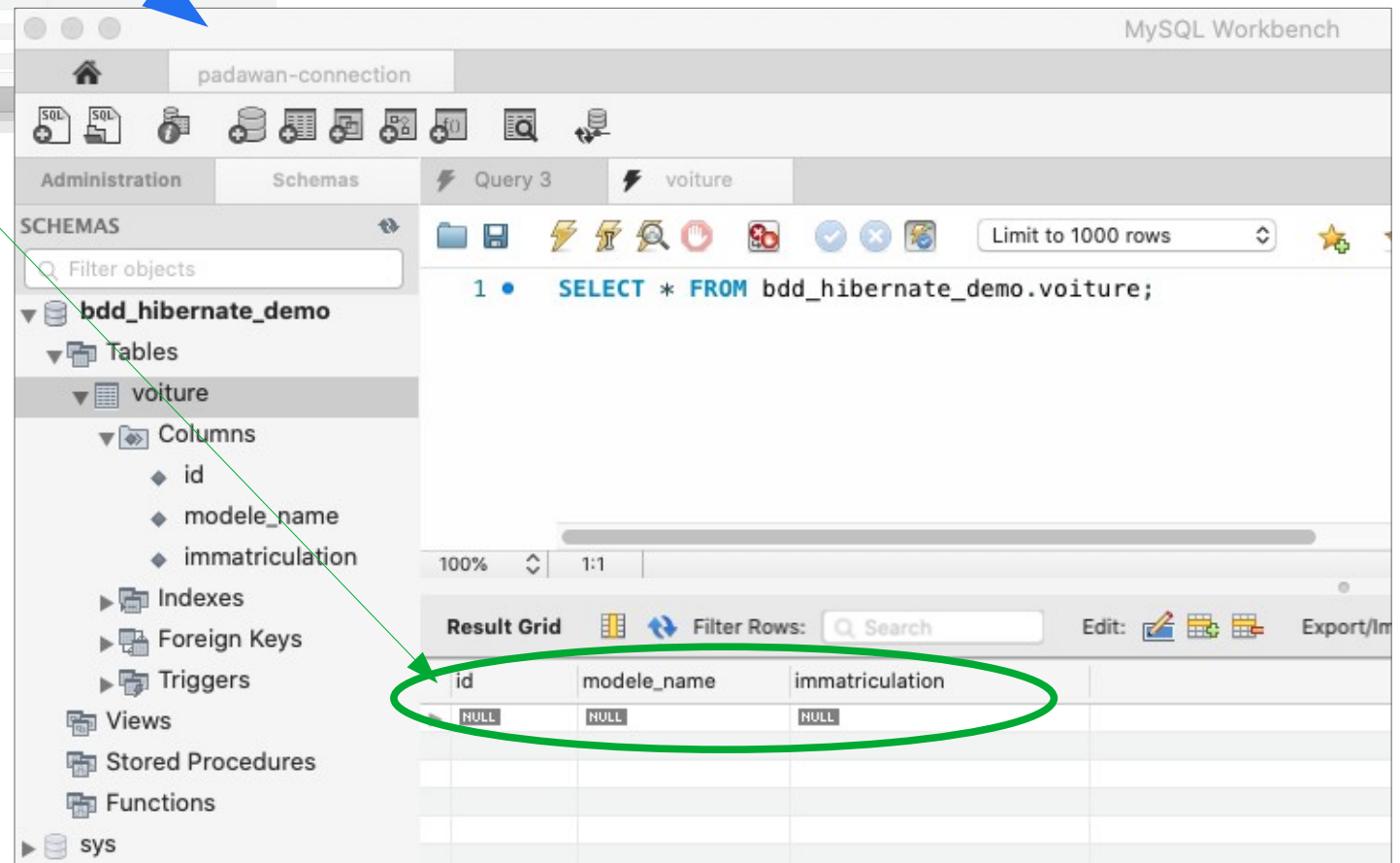
Query Completed

Copy Row
Copy Action
Copy Response
Copy Duration
Append Selected Items to SQL script
Replace SQL Script With Selected Items
Clear

Si la db et la table sont créées



Il n'y aucune donnée pour l'instant dans la table voiture. Mais tout est prêt.



Tester la connection jdbc

Dans notre projet

On a déjà les jars d'hibernate

On a déjà le connecteur jdbc pour mysql

Et maintenant on crée un nouveau package

et une classe à l'intérieur, dotée d'une méthode main(...)

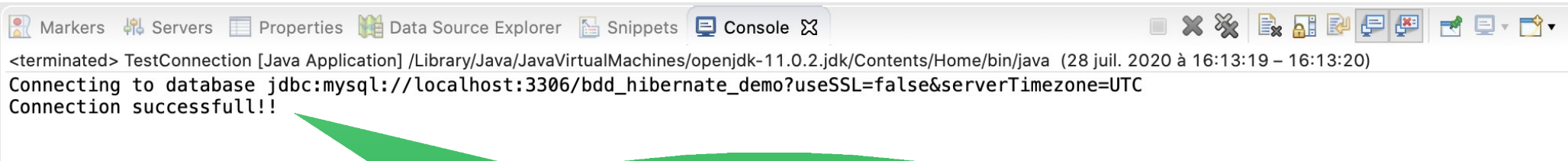
```
public class TestConnection {  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
    }  
}
```

On y ajoute le code pour créer une connection et monitorer le processus en console.

```
import java.sql.Connection;  
import java.sql.DriverManager;  
  
public class TestConnection {  
    public static void main(String[] args) {  
        String jdbcUrl="jdbc:mysql://localhost:3306/bdd_hibernate_demo?"  
            +"useSSL=false&serverTimezone=UTC";  
        String user="padawan";  
        String password = "padawan";  
        try {  
            System.out.println("Connecting to database " + jdbcUrl);  
            Connection connection = DriverManager.getConnection(jdbcUrl, user, password);  
  
            System.out.println("Connection successfull!!");  
        } catch (Exception e) {  
            e.printStackTrace();  
        }  
    }  
}
```

Executer clic droit sur TestConnection.java

> Run As > Java Application



The screenshot shows the Eclipse IDE's console window. The title bar indicates the application is 'TestConnection [Java Application]' running on 'Library/Java/JavaVirtualMachines/openjdk-11.0.2.jdk/Contents/Home/bin/java' on '28 juil. 2020 à 16:13:19 - 16:13:20'. The console output shows the connection process: 'Connecting to database jdbc:mysql://localhost:3306/bdd_hibernate_demo?useSSL=false&serverTimezone=UTC' followed by 'Connection successfull!!'. A green speech bubble points from this message to the congratulatory text below.

```
<terminated> TestConnection [Java Application] /Library/Java/JavaVirtualMachines/openjdk-11.0.2.jdk/Contents/Home/bin/java (28 juil. 2020 à 16:13:19 - 16:13:20)
Connecting to database jdbc:mysql://localhost:3306/bdd_hibernate_demo?useSSL=false&serverTimezone=UTC
Connection successfull!!
```

Félicitations !!
La connection entre Eclipse et la base de
données sur MySQL est opérationnelle.