

# LU07a - SQL-DDL: DB Management

## Learning Objectives

In this session, we will learn some thrilling details about how to properly manage our databases. To achieve this, we need to know more about:

1. What a db schema / db instance is.
2. How to create database instances.
3. How to display all currently available instances.
4. How to connect to one specific db-instance.
5. how you can delete obsolete or no longer required databases.

## Access to the db with Webstorm code editor

There are many ways how we can connect to our database instance. One way is from the terminal or commandline. Instead, during the module 290 we are going to use do the management with the code editor WEBSTORM, which is pictured below.

1. New connection to our MySQL database system
2. The already existing connections to our database instance
3. New terminal window to the database to enter sql commands (leads to 4.)
4. Terminal to the database to enter our SQL commands
5. Execute button that sends the SQL command to the database



## Commands

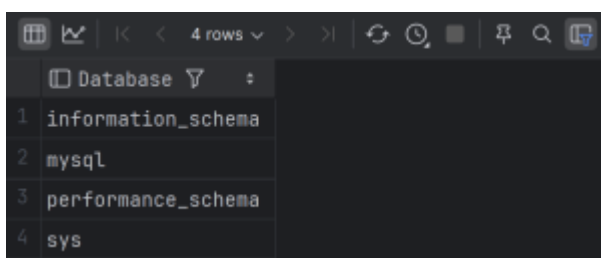
### SHOW DATABASES

Source: [Alle verfügbaren Datenbanken anzeigen lassen](#)

To show all currently available datases we use the SHOW command. The basic syntax is as shown below:

```
SHOW DATABASES;
```

After executing this command, we will receive the list of currently installed database instances, as shown in the following picture.



## CREATE DATABASES

Source: [CREATE DB](#)

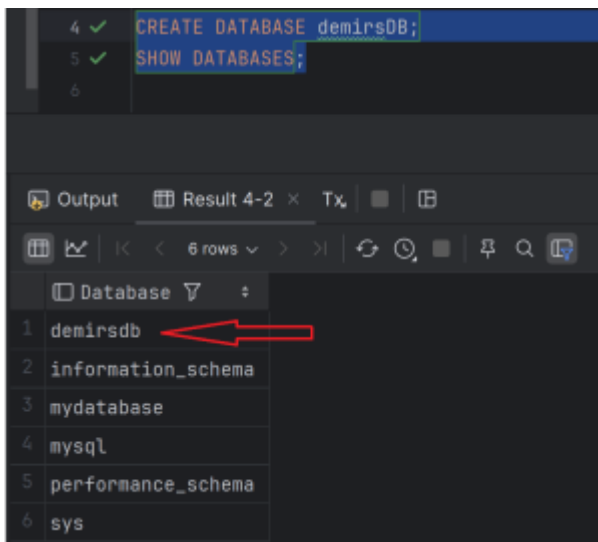
A new application is basically constructed within a new environment. Therefore we need to create a new database instance for us. To achieve this, which is done by the following command syntax.

```
CREATE DATABASE myDatabase;
```

So, if we want to create a new database for a webshop for our customer „Demir“, we need to type in:

```
CREATE DATABASE DemirsDB;  
SHOW DATABASES;
```

After executing both commands, our result-set would look like:



## DROP DATABASES

Source: [DROP DB](#)

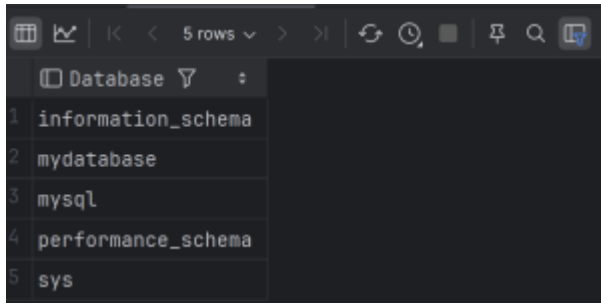
It can happen, that our database is corrupted, obsolete or otherwise not required any more. Thus, we have to delete it, which is done by the command

```
DROP DATABASE myDatabase;
```

So, if we want to delete demirsDB, we need to type in the following SQL commands.

```
DROP DATABASE demirsDB;  
SHOW DATABASES;
```

After, executing both commands, the result-set would look like:



## Using databases

Most database systems usually have more than one instance (project areas) running, e.g. DIGITECH.CH and GALAXUS.CH, these two database instances (storage areas for different purposes) are running on the same database systems, but organize their data separately.

As a database administrator, we cannot work on different instances at the same time, so we have to choose which instance we actually want to work on. The SQL statement in question is the USE command.

As a database administrator, we cannot work on different instances at the same time, so we have to choose which instance we actually want to work on. The SQL statement in question is the USE command.

```
10 CREATE DATABASE demirsDB1;
11 CREATE DATABASE demirsDB2;
12 CREATE DATABASE demirsDB3;
13 SHOW DATABASES;
14 ✓ USE demirsDB3;
```

## Vocabulary

English	Deutsch
Obsolete	veraltet
result-set	Ergebnismenge



Volkan Demir

From:  
<https://wiki.bzz.ch/> - BZZ - Modulwiki

Permanent link:  
<https://wiki.bzz.ch/modul/m290/learningunits/lu05/theorie/01?rev=1729766463>

Last update: 2024/10/24 12:41

