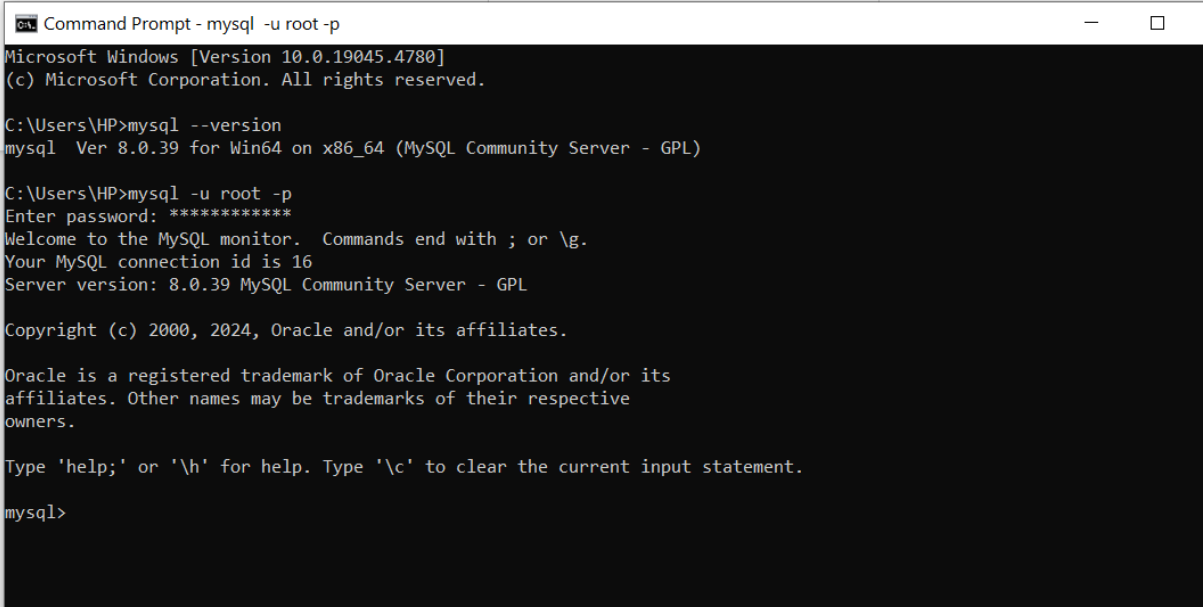


❖ MYSQL (RDBMS) - Structured

## 1) Successfully installed MySql



```
ca Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.19045.4780]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>mysql --version
mysql Ver 8.0.39 for Win64 on x86_64 (MySQL Community Server - GPL)

C:\Users\HP>mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 16
Server version: 8.0.39 MySQL Community Server - GPL

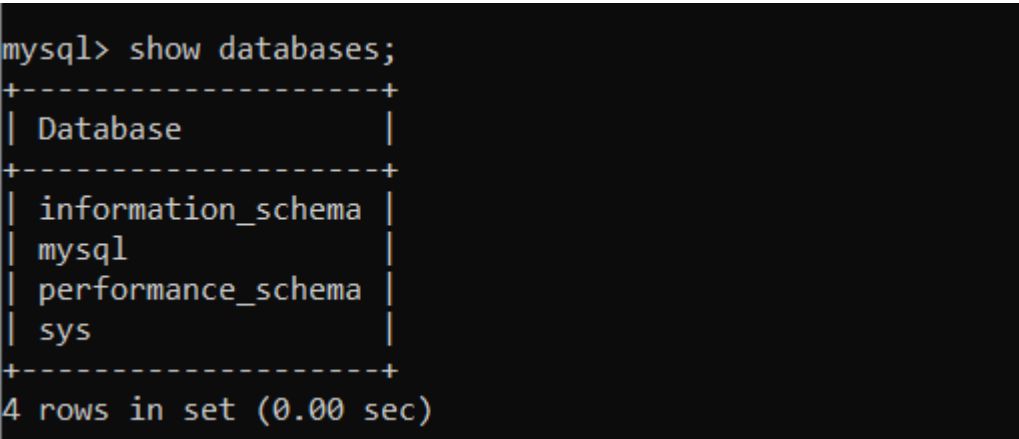
Copyright (c) 2000, 2024, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
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>
```

## 2) Show existing databases



```
mysql> show databases;
+-----+
| Database                |
+-----+
| information_schema      |
| mysql                   |
| performance_schema      |
| sys                     |
+-----+
4 rows in set (0.00 sec)
```

## 3) Create new database

```
mysql> create database AWSDevops;  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> show databases;  
+-----+  
| Database |  
+-----+  
| awsdevops |  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
5 rows in set (0.00 sec)  
  
mysql>
```

4) Create table in (awsdevops)database

```
mysql> use awsdevops;  
Database changed  
mysql> create table student(name varchar(30),ID int,address varchar(50),Marks int);  
Query OK, 0 rows affected (0.04 sec)  
  
mysql> desc student;  
+-----+  
| Field | Type | Null | Key | Default | Extra |  
+-----+  
| name | varchar(30) | YES | | NULL | |  
| ID | int | YES | | NULL | |  
| address | varchar(50) | YES | | NULL | |  
| Marks | int | YES | | NULL | |  
+-----+  
4 rows in set (0.00 sec)  
  
mysql>
```

5) Insert some values in table

```
mysql> insert into student(name,id,address,marks)values('jasmin',10,'pune',80);  
Query OK, 1 row affected (0.02 sec)  
  
mysql> insert into student values('rohi',11,'mumbai',75);  
Query OK, 1 row affected (0.02 sec)  
  
mysql> insert into student values('ram',12,'pune',75),('sham',13,'Nagar',90);  
Query OK, 2 rows affected (0.02 sec)  
Records: 2 Duplicates: 0 Warnings: 0  
  
mysql> select * from student;  
+-----+  
| name | ID | address | Marks |  
+-----+  
| jasmin | 10 | pune | 80 |  
| rohi | 11 | mumbai | 75 |  
| ram | 12 | pune | 75 |  
| sham | 13 | Nagar | 90 |  
+-----+  
4 rows in set (0.00 sec)  
  
mysql>
```

6) Select particular columns from table.

```
mysql> select name,id from student;
+-----+-----+
| name  | id   |
+-----+-----+
| jasmin | 10   |
| rohi   | 11   |
| ram    | 12   |
| sham   | 13   |
+-----+-----+
4 rows in set (0.00 sec)

mysql> select id,address,marks from student;
+-----+-----+-----+
| id   | address | marks |
+-----+-----+-----+
| 10   | pune    | 80    |
| 11   | mumbai  | 75    |
| 12   | pune    | 75    |
| 13   | Nagar   | 90    |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

7) Select particular details from student table

```
mysql> select * from student where address='pune';
+-----+-----+-----+-----+-----+
| name  | ID   | address | Marks | phoneNo |
+-----+-----+-----+-----+-----+
| jasmin | 10   | pune    | 80    | NULL    |
| ram    | 12   | pune    | 75    | NULL    |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from student where id=13;
+-----+-----+-----+-----+-----+
| name  | ID   | address | Marks | phoneNo |
+-----+-----+-----+-----+-----+
| sham  | 13   | Nagar   | 90    | NULL    |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select * from student where marks=80;
+-----+-----+-----+-----+-----+
| name  | ID   | address | Marks | phoneNo |
+-----+-----+-----+-----+-----+
| jasmin | 10   | pune    | 80    | NULL    |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

8) Delete column "phoneNo" from student table

```
mysql> alter table student drop column phoneNo;
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

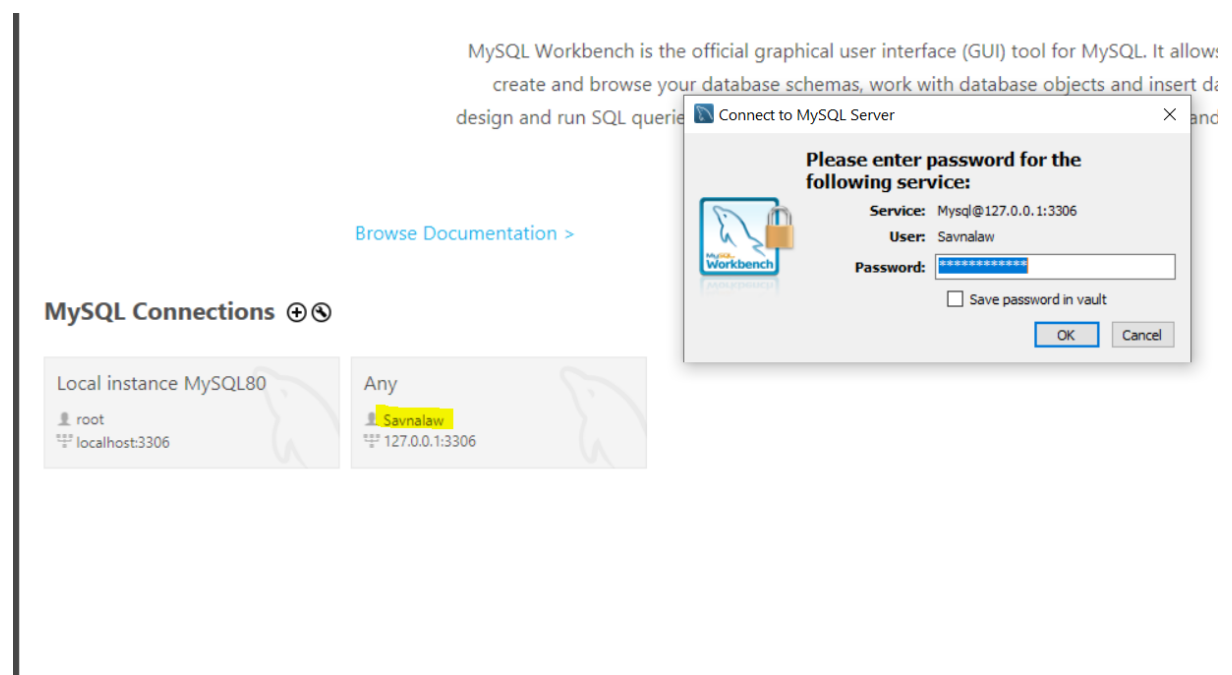
mysql> select * from student;
+-----+-----+-----+-----+
| name  | ID   | address | Marks |
+-----+-----+-----+-----+
| jasmin | 10   | pune    | 80    |
| rohi  | 11   | mumbai  | 75    |
| ram    | 12   | pune    | 75    |
| sham  | 13   | Nagar   | 90    |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

9) Create user "Savita" from mysql command line

```
mysql> create user 'Savita'@'localhost' identified by 'ABC@XYZqa1234';
Query OK, 0 rows affected (0.03 sec)
```

10) Created one more user from MySql Workbench and try to login



11) Successfully login

**Client Connections**

Threads Connected: 5    Threads Running: 2    Threads Created: 6    Threads Cached: 1    Rejected (over limit): 0  
 Total Connections: 43    Connection Limit: 151    Aborted Clients: 11    Aborted Connections: 8    Errors: 0

Id	User	Host	DB	Command	Time	State	Threa...	Type	Name	Paren...	Instrumented	Inf
5	event_sched...	localhost	None	Daemon	6445	Waiting on e...	43	BACKGROUND	thread/sql/e...	1	YES	NU
7	None	None	None	Daemon	6445	Suspending	46	BACKGROUND	thread/sql/e...	1	YES	NU
29	root	localhost	awsdevops	Sleep	101	None	69	BACKGROUND	thread/sql/o...	0	YES	NU
40	Savnalaw	localhost	None	Sleep	53	None	80	BACKGROUND	thread/sql/o...	0	YES	NU
41	Savnalaw	localhost	None	Sleep	53	None	81	BACKGROUND	thread/sql/o...	0	YES	NU
42	Savnalaw	localhost	None	Query	0	executing	82	BACKGROUND	thread/sql/o...	0	YES	SEI
43	Savnalaw	localhost	None	Sleep	1	None	83	BACKGROUND	thread/sql/o...	0	YES	NU

## ❖ NON-SQL (NRDBMS) Non-Structured

### 1) Installed Mongo

```

Command Prompt - mongo
Microsoft Windows [Version 10.0.19045.4780]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>mongo
MongoDB shell version v5.0.28
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("059a1d70-8bfa-4ece-9122-4b763a6a33a4") }
MongoDB server version: 5.0.28
=====
Warning: the "mongo" shell has been superseded by "mongosh",
which delivers improved usability and compatibility. The "mongo" shell has been deprecated and will be removed in
an upcoming release.
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
=====
---
The server generated these startup warnings when booting:
  2024-09-03T14:43:51.308+05:30: Access control is not enabled for the database. Read and write access to data and
  configuration is unrestricted
---
>

```

### 2) Installed Mogo-Shell

```
mongosh mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000
Please enter a MongoDB connection string (Default: mongodb://localhost/): mongodb://127.0.0.1:27017/
mongodb://127.0.0.1:27017/
Current Mongosh Log ID: 66d6d83f3b52d5d6fe2710bb
Connecting to:  mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.3.0
Using MongoDB:  5.0.28
Using Mongosh:  2.3.0

For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

-----
The server generated these startup warnings when booting
  2024-09-03T14:43:51.308+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
-----

Warning: Found ~/.mongorc.js, but not ~/.mongoshrc.js. ~/.mongorc.js will not be loaded.
You may want to copy or rename ~/.mongorc.js to ~/.mongoshrc.js.
test>
```

3) Used “cscorner” as database then created new collection as “student”

```
test> show dbs
admin    40.00 KiB
config  108.00 KiB
local    40.00 KiB
test> show database
MongoshInvalidInputError: [COMMON-10001] 'database' is not a valid argument for "show".
test> use cscorner
switched to db cscorner
cscorner> show dbs
admin    40.00 KiB
config  108.00 KiB
local    40.00 KiB
cscorner> db.createCollection("student")
{ ok: 1 }
cscorner> show dbs
admin    40.00 KiB
config  108.00 KiB
cscorner  8.00 KiB
local    40.00 KiB
cscorner>
```

4) Created entries into student collection

```
cscorner> db.student
cscorner.student
cscorner> db.student.insertOne({Name:"Savita",Age:24})
{
  acknowledged: true,
  insertedId: ObjectId('66d6db153b52d5d6fe2710bc')
}
cscorner> db.student.insertOne({Name:"Sita",Age:25})
{
  acknowledged: true,
  insertedId: ObjectId('66d6db233b52d5d6fe2710bd')
}
cscorner> db.student.insertOne({Name:"Ram",Age:35})
{
  acknowledged: true,
  insertedId: ObjectId('66d6db383b52d5d6fe2710be')
}
```

5) Show all entries of student

```

cscorner> db.student.find()
[
  {
    _id: ObjectId('66d6db153b52d5d6fe2710bc'),
    Name: 'Savita',
    Age: 24
  },
  { _id: ObjectId('66d6db233b52d5d6fe2710bd'), Name: 'Sita', Age: 25 },
  { _id: ObjectId('66d6db383b52d5d6fe2710be'), Name: 'Ram', Age: 35 }
]
cscorner>

```

6) shows collections in current database

```

cscorner> show collections
student
cscorner>

```

7) Find Multiple and single entry

```

cscorner> db.student.find()
[
  {
    _id: ObjectId('66d6db153b52d5d6fe2710bc'),
    Name: 'Savita',
    Age: 24
  },
  { _id: ObjectId('66d6db233b52d5d6fe2710bd'), Name: 'Sita', Age: 25 },
  { _id: ObjectId('66d6db383b52d5d6fe2710be'), Name: 'Ram', Age: 35 },
  {
    _id: ObjectId('66d6dca43b52d5d6fe2710bf'),
    Name: 'Riya',
    Address: 'Pune'
  }
]
cscorner> db.student.findOne({Name:"Savita"})
{ _id: ObjectId('66d6db153b52d5d6fe2710bc'), Name: 'Savita', Age: 24 }
cscorner>

```

8) Update existing entry

```

cscorner> db.student.updateOne({Name: 'Ram'}, {$set: {Name: 'Sham'}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
cscorner> db.student.find()
[
  {
    _id: ObjectId('66d6db153b52d5d6fe2710bc'),
    Name: 'Savita',
    Age: 24
  },
  { _id: ObjectId('66d6db233b52d5d6fe2710bd'), Name: 'Sita', Age: 25 },
  { _id: ObjectId('66d6db383b52d5d6fe2710be'), Name: 'Sham', Age: 35 },
  {
    _id: ObjectId('66d6dca43b52d5d6fe2710bf'),
    Name: 'Riya',
    Address: 'Pune'
  }
]
cscorner>

```

#### 9) Delete entry

```

cscorner> db.student.deleteOne({Age: 25})
{ acknowledged: true, deletedCount: 1 }
cscorner> db.student.find()
[
  {
    _id: ObjectId('66d6db153b52d5d6fe2710bc'),
    Name: 'Savita',
    Age: 24
  },
  { _id: ObjectId('66d6db383b52d5d6fe2710be'), Name: 'Sham', Age: 35 },
  {
    _id: ObjectId('66d6dca43b52d5d6fe2710bf'),
    Name: 'Riya',
    Address: 'Pune'
  }
]
cscorner>

```

#### 10) Delete all the records

```

cscorner> db.student.deleteMany({})
{ acknowledged: true, deletedCount: 3 }
cscorner> db.student.find()

cscorner>

```



localhost:27017 ...

My Queries

Performance

Databases

Search

admin

config

cscorner

student

local

My Queries student +


localhost:27017 > cscorner > student

Documents 0 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Generate query](#)

Explain Reset Find Options

ADD DATA EXPORT DATA UPDATE DELETE 25 0 - 0 of 0



**This collection has no data**  
It only takes a few seconds to import data from a JSON or CSV file.

Import Data