

## Sqoop: To write SQL Queries.

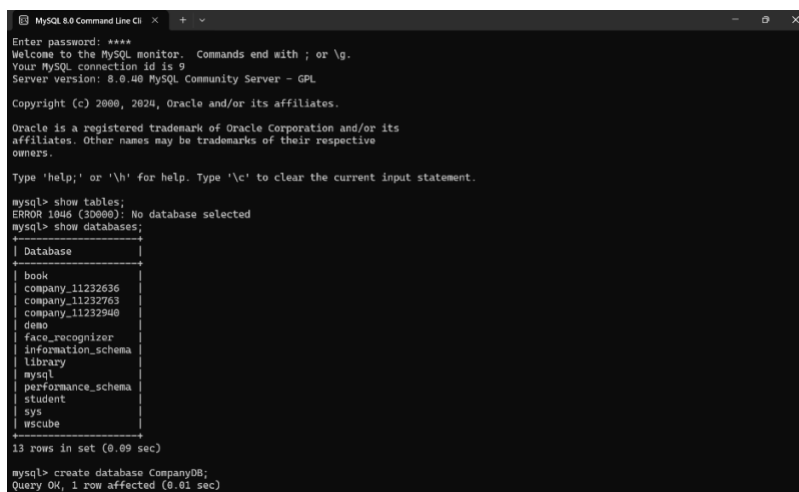
Apache Sqoop is a tool designed for efficiently importing bulk data from structured datastores into Hadoop Distributed File System (HDFS) and exporting data back from Hadoop into relational databases.

### Key Features:

- Import data from **RDBMS** → **Hadoop (HDFS, Hive, HBase)**
- Export data from **Hadoop** → **RDBMS**
- Supports parallel processing → **faster transfer**
- Automatically generates Java classes for data records
- Can transfer **incremental data** (new or updated rows only)

### 1.Create Database

→CREATE DATABASE CompanyDB;

A screenshot of the MySQL Command Line Client window. The window title is "MySQL 8.0 Command Line Client". The prompt is "mysql>". The user has entered "show tables;" and received an error: "ERROR 1046 (3D000): No database selected". Then, the user entered "show databases;" and received a list of 13 databases: book, company\_11232636, company\_11232763, company\_11232940, demo, face\_recognizer, information\_schema, library, mysql, performance\_schema, student, sys, and wscube. Finally, the user entered "create database CompanyDB;" and received the message: "Query OK, 1 row affected (0.01 sec)".

```
mysql> show tables;
ERROR 1046 (3D000): No database selected
mysql> show databases;
+-----+
| Database |
+-----+
| book |
| company_11232636 |
| company_11232763 |
| company_11232940 |
| demo |
| face_recognizer |
| information_schema |
| library |
| mysql |
| performance_schema |
| student |
| sys |
| wscube |
+-----+
13 rows in set (0.09 sec)

mysql> create database CompanyDB;
Query OK, 1 row affected (0.01 sec)
```

### 2.Create Table

→USE CompanyDB;

→CREATE TABLE Employees (

EmpID INT PRIMARY KEY AUTO\_INCREMENT,

EmpName VARCHAR(50),

Department VARCHAR(30),

Salary DECIMAL(10,2),

JoiningDate DATE

);

```

MySQL 8.0 Command Line Cli
mysql> use CompanyDB;
Database changed
mysql> show tables;
Empty set (0.02 sec)

mysql> USE CompanyDB;
Database changed
mysql>
mysql> CREATE TABLE Employees (
  ->   EmpID INT PRIMARY KEY AUTO_INCREMENT,
  ->   EmpName VARCHAR(50),
  ->   Department VARCHAR(30),
  ->   Salary DECIMAL(10,2),
  ->   JoiningDate DATE
  -> );
Query OK, 0 rows affected (0.06 sec)

mysql> INSERT INTO Employees (EmpName, Department, Salary, JoiningDate)
  -> VALUES
  -> ('Rahul Sharma', 'IT', 55000, '2022-06-10'),
  -> ('Priya Verma', 'HR', 45000, '2021-09-15'),
  -> ('Amit Kumar', 'Finance', 60000, '2020-01-20'),
  -> ('Neha Gupta', 'Marketing', 50000, '2023-03-01');
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> show tables;
+-----+
| Tables_in_companydb |
+-----+
| employees            |
+-----+
1 row in set (0.01 sec)

```

### 3.Insert Records

→INSERT INTO Employees (EmpName, Department, Salary, JoiningDate)

VALUES

('Rahul Sharma', 'IT', 55000, '2022-06-10'),

('Priya Verma', 'HR', 45000, '2021-09-15'),

('Amit Kumar', 'Finance', 60000, '2020-01-20'),

('Neha Gupta', 'Marketing', 50000, '2023-03-01');

```

mysql> desc employees
-> ;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| EmpID      | int           | NO   | PRI | NULL    | auto_increment |
| EmpName    | varchar(50)   | YES  |     | NULL    |                |
| Department | varchar(30)   | YES  |     | NULL    |                |
| Salary     | decimal(10,2) | YES  |     | NULL    |                |
| JoiningDate | date          | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.02 sec)

```

SHOW DATABASES; →1. Show all databases

USE CompanyDB; →2. Use your database

SHOW TABLES; →3. Show all tables in the database

DESC Employees; →4. See the structure of a table (columns, data types, keys)

SELECT \* FROM Employees; →5. See all records in a table