## https://www.w3schools.com/sql/sql\_in.asp

## SQL List All tables (sqltutorial.org)

http://localhost/phpmyadmin/

# **Table of Contents**

1.	login to the database server	2
2.	Create Database	
3.	Show Databases	2
4.	Use databases	2
5.	Delete database	2
6.	Create Tables	2
7.	SQL command to list all tables in MySQL	4
8.	Describe the Tables (List its columns' definition)	4
9.	Delete Table(Relation)	4
10.	TRUNCATE TABLE	4
11.	ALTER TABLE (Used to add an attribute to one of the base relations)	4
12.	ALTER TABLE - DROP COLUMN	4
13.	ALTER TABLE - ALTER/MODIFY COLUMN	4
14.	INSERT tuples in Relations	5
15.	SQL Insert Multiple Rows	5
16.	DELETE tuples from Relation	5
17	LIDDATE	6

## 1. login to the database server

>mysql -u root -p Enter password: root mysql>

#### 2. Create Database

Syntax:

CREATE DATABASE <databasename>;

Example:

**CREATE DATABASE COMPANY;** 

#### 3. Show Databases

mysql> **SHOW DATABASES**;

**SHOW SCHEMAS**;

#### 4. Use databases

Syntax: Use <databasename>;

**USE COMPANY**;

#### 5. Delete database

Syntax: DROP DATABASE <name>;

**DROP DATABASE COMPANY;** 

#### 6. Create Tables

PRIMARY KEY (Ssn));

CREATE TABLE EMPLOYEE(
Ssn INT NOT NULL,
Fname varchar(25),
Mnit varchar(25),
Lname varchar(25),
Bdate date,
Address varchar(255),
Sex char(1),
Salary decimal(6,2),
Super\_ssn int,
Dno INT,

CREATE TABLE DEPARTMENT ( Dname VARCHAR(10) NOT NULL, Dnumber INT NOT NULL, Mgr\_ssn INT, Mgr\_start\_date date, PRIMARY KEY (Dnumber)); CREATE TABLE PROJECT ( Pname VARCHAR(10) NOT NULL, Pnumber INTEGER NOT NULL, Plocation CHAR(9), Dnum INTEGER NOT NULL, PRIMARY KEY (Pnumber); CREATE TABLE DEPENDENT ( Essn int NOT NULL, Dependent\_name varchar(25), Sex CHAR(1), Bdate date, Relationship VARCHAR(25), PRIMARY KEY (Essn, Dependent name); CREATE TABLE DEPT\_LOCATIONS ( Dnumber INT NOT NULL, Dlocation CHAR(9), PRIMARY KEY (Dnumber); CREATE TABLE WORKS\_ON ( Essn INT NOT NULL, Pno INT NOT NULL, Hours INT, PRIMARY KEY (Essn, Pno);

- Adding the Foreign Key Constraint

ALTER TABLE EMPLOYEE ADD FOREIGN KEY (Dno) REFERENCES DEPARTMENT (Dnumber);

Or

ALTER TABLE EMPLOYEE ADD FOREIGN KEY(Dno) REFERENCES DEPARTMENT(Dnumber);

ON DELETE CASCADE

ON UPDATE CASCADE:

### 7. SQL command to list all tables in MySQL

**SHOW TABLES** 

### 8. Describe the Tables (List its columns' definition)

describe EMPLOYEE;

## 9. Delete Table(Relation)

The DROP TABLE command deletes a table in the database.

DROP TABLE < Table name>;

#### **10.TRUNCATE TABLE**

The TRUNCATE TABLE command deletes the data inside a table, but not the table itself.

#### **Example**

TRUNCATE TABLE EMPLOYEE;

### 11.ALTER TABLE (Used to add an attribute to one of the base relations)

#### Syntax:

ALTER TABLE table\_name ADD column\_name datatype; Example:

ALTER TABLE EMPLOYEE ADD JOB VARCHAR(12);

#### 12.ALTER TABLE - DROP COLUMN

Syntax:

ALTER TABLE table\_name DROP COLUMN column\_name;

## 13.ALTER TABLE - ALTER/MODIFY COLUMN

To change the data type of a column in a table, use the following syntax:

ALTER TABLE table\_name
ALTER COLUMN column\_name datatype;
Or

```
ALTER TABLE table_name
MODIFY COLUMN column_name datatype;
```

#### 14.INSERT tuples in Relations

INSERT INTO EMPLOYEE VALUES ('Richard','K','Marini', '653298653', '30-DEC-52','98 Oak Forest,Katy,TX', 'M', 37000,'987654321', 4);

```
INSERT INTO EMPLOYEE (Fname, Lname, Ssn)
VALUES ('Richard', 'Marini', '653298653');
```

### **15.SQL Insert Multiple Rows**

```
CREATE TABLE customer (
first_name VARCHAR(100),
last_name VARCHAR(100)
);
```

Now, we can INSERT multiple rows in SQL by repeating the list of values inside the brackets:

```
INSERT INTO customer (first_name, last_name) VALUES ('Kristen', 'Rowley'), ('Jed', 'Tomlinson'), ('Margie', 'Escobar'), ('Harriette', 'Mejia'), ('Francis', 'Little');
```

### 16.DELETE tuples from Relation

**Delete Tuples from Relation:** 

DELETE FROM table WHERE condition;

DELETE FROM EMPLOYEE WHERE Lname='Brown';

DELETE FROM EMPLOYEE WHERE Ssn='123456789';

DELETE FROM EMPLOYEE WHERE Dno IN
(SELECT Dnumber
FROM DEPARTMENT
WHERE Dname='Research');

(To remove all rows in the employees table)

**DELETE FROM EMPLOYEE;** 

## **17.UPDATE**

UPDATE PROJECT
SET Plocation='Bellaire', Dnum = 5
WHERE Pnumber=10;