# SQL - Syntax

SQL is followed by a unique set of rules and guidelines called Syntax. This tutorial gives you a quick start with SQL by listing all the basic SQL Syntax.

All the SQL statements start with any of the keywords like SELECT, INSERT, UPDATE, DELETE, ALTER, DROP, CREATE, USE, SHOW and all the statements end with a semicolon (;).

The most important point to be noted here is that SQL is case insensitive, which means SELECT and select have same meaning in SQL statements. Whereas, MySQL makes difference in table names. So, if you are working with MySQL, then you need to give table names as they exist in the database.

# Various Syntax in SQL

All the examples given in this tutorial have been tested with a MySQL server.

# **SQL SELECT Statement**

```
SELECT column1, column2....columnN
FROM table_name;
```

#### **SQL DISTINCT Clause**

```
SELECT DISTINCT column1, column2....columnN
FROM table_name;
```

#### **SQL WHERE Clause**

```
SELECT column1, column2....columnN
FROM table_name
WHERE CONDITION;
```

#### **SQL DAN / ATAU Klausul**

```
SELECT column1, column2....columnN
FROM table_name
WHERE CONDITION-1 {AND|OR} CONDITION-2;
```

## Klausul SQL IN

```
SELECT column1, column2....columnN
FROM table_name
WHERE column_name IN (val-1, val-2,...val-N);
```

## Klausul SQL ANTARA

```
SELECT column1, column2....columnN
FROM table_name
WHERE column_name BETWEEN val-1 AND val-2;
```

#### Klausa SEPERTI SQL

```
SELECT column1, column2....columnN
FROM table_name
WHERE column_name LIKE { PATTERN };
```

#### **SQL ORDER BY Clause**

```
SELECT column1, column2....columnN
FROM table_name
WHERE CONDITION
ORDER BY column_name {ASC|DESC};
```

#### **SQL GROUP BY Klausul**

```
SELECT SUM(column_name)
FROM table_name
WHERE CONDITION
GROUP BY column_name;
```

#### **SQL COUNT Clause**

```
SELECT COUNT(column_name)
FROM table_name
WHERE CONDITION;
```

#### Klausul SQL HAVING

```
SELECT SUM(column_name)
FROM table_name
```

```
WHERE CONDITION
GROUP BY column_name
HAVING (arithematic function condition);
```

### Pernyataan SQL CREATE TABLE

```
CREATE TABLE table_name(
column1 datatype,
column2 datatype,
column3 datatype,
.....
columnN datatype,
PRIMARY KEY( one or more columns )
);
```

## Pernyataan SQL DROP TABLE

```
DROP TABLE table_name;
```

## Pernyataan SQL CREATE INDEX

```
CREATE UNIQUE INDEX index_name
ON table_name ( column1, column2,...columnN);
```

#### Pernyataan SQL DROP INDEX

```
ALTER TABLE table_name
DROP INDEX index_name;
```

## Pernyataan SQL DESC

```
DESC table_name;
```

## Pernyataan SQL TRUNCATE TABLE

```
TRUNCATE TABLE table_name;
```

## Pernyataan SQL ALTER TABLE

```
ALTER TABLE table_name {ADD|DROP|MODIFY} column_name {data_ype};
```

## Pernyataan SQL ALTER TABLE (Ganti Nama)

```
ALTER TABLE table_name RENAME TO new_table_name;
```

## Pernyataan SQL INSERT INTO

```
INSERT INTO table_name( column1, column2....columnN)
VALUES ( value1, value2....valueN);
```

## Pernyataan SQL UPDATE

```
UPDATE table_name
SET column1 = value1, column2 = value2....columnN=valueN
[ WHERE CONDITION ];
```

#### Pernyataan SQL DELETE

```
DELETE FROM table_name
WHERE {CONDITION};
```

## Pernyataan SQL CREATE DATABASE

CREATE DATABASE database\_name;

#### Pernyataan SQL DROP DATABASE

DROP DATABASE database\_name;

## Pernyataan Penggunaan SQL

USE database name;

#### Pernyataan SQL COMMIT

COMMIT;

## Pernyataan SQL ROLLBACK

ROLLBACK;