SQL Tutorial

**SQL komut kategoriler**

* DDL (Data Definition Language): CREATE / ALTER / DROP
* DML (Data Management Language): SELECT / INSERT / UPDATE / DELETE
* DCL (Data Control Language): GRANT / REVOKE

**SQL komut örnekler**

CREATE DATABASE - creates a new database

ALTER DATABASE - modifies a database

CREATE TABLE - creates a new table

ALTER TABLE - modifiers a table

DROP TABLE - deletes a table

CREATE INDEX - creates an index (search key)

DROP INDEX - deletes an index

SELECT - extracts data from a database

UPDATE - updates data in a database

DELETE - deletes data from a database

INSERT INTO - inserts new data into a database

**DB oluşturma**

CREATE DATABASE dbDukkan

ON PRIMARY(

NAME=DUKKAN\_DATA,

FILENAME=«D:\data\dukkan\_data.mdf»,

SIZE=50,

MAXSIZE=1GB,

FILEGROWTH=20%

)

LOG ON (

NAME=DUKKAN\_LOG,

FILENAME=«E:\data\dukkan\_log.ldf»,

SIZE=12MB,

MAXSIZE=250MB,

FILEGROWTH=20%

)

**DB silme**

DROP DATABASE dbDukkan

**Tablo oluşturma**

CREATE TABLE yazarlar(

-- IDENTITY (başlangıç değeri, artış miktarı)

id TINYINT IDENTITY(1,1) NOT NULL,

yazar\_adi NVARCHAR (20),

yazar\_soyadi NVARCHAR (20),

kategori NVARCHAR (20) ,

);

**Tablo silme**

DROP TABLE Departman

**SQL operatörler**

|  |  |
| --- | --- |
| **Operator** | **Description** |
| = | Equal |
| <> | Not equal. Note: In some versions of SQL this operator may be written as != |
| > | Greater than |
| < | Less than |
| >= | Greater than or equal |
| <= | Less than or equal |
| BETWEEN | Between a certain range |
| LIKE | Search for a pattern |
| IN | To specify multiple possible values for a column |

**Example**

**SELECT**

SELECT CustomerName, City FROM Customers;

**DISTINCT**

SELECT DISTINCT Country FROM Customers;

**WHERE**

SELECT \* FROM Customers WHERE Country='Mexico';

SELECT \* FROM Customers WHERE CustomerID=1;

**AND\_OR\_ NOT**

SELECT \* FROM Customers WHERE Country='Germany' AND City='Berlin';

SELECT \* FROM Customers WHERE City='Berlin' OR City='München';

SELECT \* FROM Customers WHERE NOT Country='Germany';

Combining AND\_OR\_ NOT

SELECT \* FROM Customers

WHERE Country='Germany' AND (City='Berlin' OR City='München');

SELECT \* FROM Customers

WHERE NOT Country='Germany' AND NOT Country='USA';

**ORDER BY**

SELECT \* FROM Customers ORDER BY Country;

SELECT \* FROM Customers ORDER BY Country DESC;

SELECT \* FROM Customers ORDER BY Country ASC, CustomerName DESC;

**INSERT INTO**

INSERT INTO Customers (CustomerName, ContactName,,Country)

VALUES ('Cardinal', 'Tom B. Erichsen', 'Norway');

**NOT VALUES**

SELECT CustomerName, ContactName, Address FROM Customers

WHERE Address IS NOT NULL; (IS NOT NULL yerine IS NULL olsa)

**UPDATE**

UPDATE Customers

SET ContactName = 'Alfred Schmidt', City= 'Frankfurt'

WHERE CustomerID = 1;

UPDATE Customers SET ContactName='Juan'

WHERE Country='Mexico';

UPDATE Customers SET ContactName='Juan';

**DELETE**

DELETE FROM Customers WHERE CustomerName='AlfredsFutterkiste';

DELETE FROM Customers;

**SELECT TOP**

SELECT TOP 3 \* FROM Customers;

SELECT \* FROM Customers LIMIT 3; ?

SELECT TOP 50 PERCENT \* FROM Customers;

**MIN()\_MAX()**

SELECT MIN(Price) AS Enucuzu FROM Products;

SELECT MAX(Price) AS Enpahalısı FROM Products;

**COUNT()\_AVG()\_SUM()**

SELECT COUNT(ProductID) FROM Products;

SELECT AVG(Price) FROM Products;

SELECT SUM(Quantity) FROM OrderDetails;

**LIKE**

SELECT \* FROM Customers WHERE CustomerName LIKE 'a%';

|  |  |
| --- | --- |
| **LIKE Operator** | **Description** |
| WHERE Name LIKE 'a%' | Finds any values that start with "a" |
| WHERE Name LIKE '%a' | Finds any values that end with "a" |
| WHERE Name LIKE '%or%' | Finds any values that have "or" in any position |
| WHERE Name LIKE '\_r%' | Finds any values that have "r" in the second position |
| WHERE Name LIKE 'a\_%\_%' | Finds any values that start with "a" and are at least 3 characters in length |
| WHERE Name LIKE 'a%o' | Finds any values that start with "a" and ends with "o" |