|  |  |  |  |
| --- | --- | --- | --- |
| **SQL Statement** | **Syntax** | Example |  |
|  |  |  |  |
| AND / OR | SELECT column\_name(s) FROM table\_name WHERE condition AND|OR condition |  |  |
|  |  |  |  |
| ALTER TABLE | ALTER TABLE table\_name ADD column\_name datatype  or  ALTER TABLE table\_name DROP COLUMN column\_name |  |  |
|  |  |  |  |
| AS (alias) | SELECT column\_name AS column\_alias FROM table\_name  or  SELECT column\_name FROM table\_name  AS table\_alias |  |  |
|  |  |  |  |
| BETWEEN | SELECT column\_name(s) FROM table\_name WHERE column\_name BETWEEN value1 AND value2 |  |  |
|  |  |  |  |
| CREATE DATABASE | CREATE DATABASE database\_name |  |  |
|  |  |  |  |
| CREATE TABLE | CREATE TABLE table\_name ( column\_name1 data\_type, column\_name2 data\_type, column\_name3 data\_type, ... ) |  |  |
|  |  |  |  |
| CREATE INDEX | CREATE INDEX index\_name ON table\_name (column\_name)  or  CREATE UNIQUE INDEX index\_name ON table\_name (column\_name) |  |  |
|  |  |  |  |
| CREATE VIEW | CREATE VIEW view\_name AS SELECT column\_name(s) FROM table\_name WHERE condition |  |  |
|  |  |  |  |
| DELETE | DELETE FROM table\_name WHERE some\_column=some\_value  or  DELETE FROM table\_name (**Note:**Deletes the entire table!!)  DELETE \* FROM table\_name (**Note:**Deletes the entire table!!) |  |  |
|  |  |  |  |
| DROP DATABASE | DROP DATABASE database\_name |  |  |
|  |  |  |  |
| DROP INDEX | DROP INDEX table\_name.index\_name (SQL Server) DROP INDEX index\_name ON table\_name (MS Access) DROP INDEX index\_name (DB2/Oracle) ALTER TABLE table\_name DROP INDEX index\_name (MySQL) |  |  |
|  |  |  |  |
| DROP TABLE | DROP TABLE table\_name |  |  |
|  |  |  |  |
| EXISTS | IF EXISTS (SELECT \* FROM table\_name WHERE id = ?) BEGIN --do what needs to be done if exists END ELSE BEGIN --do what needs to be done if not END |  |  |
|  |  |  |  |
| GROUP BY | SELECT column\_name, aggregate\_function(column\_name) FROM table\_name WHERE column\_name operator value GROUP BY column\_name |  |  |
|  |  |  |  |
| HAVING | SELECT column\_name, aggregate\_function(column\_name) FROM table\_name WHERE column\_name operator value GROUP BY column\_name HAVING aggregate\_function(column\_name) operator value |  |  |
|  |  |  |  |
| IN | SELECT column\_name(s) FROM table\_name WHERE column\_name IN (value1,value2,..) |  |  |
| INSERT INTO | INSERT INTO table\_name VALUES (value1, value2, value3,....)  *or*  INSERT INTO table\_name (column1, column2, column3,...) VALUES (value1, value2, value3,....) | INSERT INTO Customers (CustomerName, ContactName, Address, City, PostalCode, Country) VALUES ('Cardinal', 'Tom B. Erichsen', 'Skagen 21', 'Stavanger', '4006', 'Norway'); |  |
|  |  |  |  |
| INNER JOIN | SELECT column\_name(s) FROM table\_name1 INNER JOIN table\_name2 ON table\_name1.column\_name=table\_name2.column\_name |  |  |
|  |  |  |  |
| LEFT JOIN | SELECT column\_name(s) FROM table\_name1 LEFT JOIN table\_name2 ON table\_name1.column\_name=table\_name2.column\_name |  |  |
|  |  |  |  |
| RIGHT JOIN | SELECT column\_name(s) FROM table\_name1 RIGHT JOIN table\_name2 ON table\_name1.column\_name=table\_name2.column\_name |  |  |
|  |  |  |  |
| FULL JOIN | SELECT column\_name(s) FROM table\_name1 FULL JOIN table\_name2 ON table\_name1.column\_name=table\_name2.column\_name |  |  |
|  |  |  |  |
| LIKE | SELECT column\_name(s) FROM table\_name WHERE column\_name LIKE pattern |  |  |
|  |  |  |  |
| ORDER BY | SELECT column\_name(s) FROM table\_name ORDER BY column\_name [ASC|DESC] |  |  |
|  |  |  |  |
| SELECT | SELECT column\_name(s) FROM table\_name |  |  |
|  |  |  |  |
| SELECT \* | SELECT \* FROM table\_name |  |  |
|  |  |  |  |
| SELECT DISTINCT | SELECT DISTINCT column\_name(s) FROM table\_name |  |  |
|  |  |  |  |
| SELECT INTO | SELECT \* INTO new\_table\_name [IN externaldatabase] FROM old\_table\_name  *or*  SELECT column\_name(s) INTO new\_table\_name [IN externaldatabase] FROM old\_table\_name |  |  |
|  |  |  |  |
| SELECT TOP | SELECT TOP number|percent column\_name(s) FROM table\_name |  |  |
|  |  |  |  |
| TRUNCATE TABLE | TRUNCATE TABLE table\_name |  |  |
|  |  |  |  |
| UNION | SELECT column\_name(s) FROM table\_name1 UNION SELECT column\_name(s) FROM table\_name2 |  |  |
|  |  |  |  |
| UNION ALL | SELECT column\_name(s) FROM table\_name1 UNION ALL SELECT column\_name(s) FROM table\_name2 |  |  |
|  |  |  |  |
| UPDATE | UPDATE table\_name SET column1=value, column2=value,... WHERE some\_column=some\_value |  |  |
|  |  |  |  |
| WHERE | SELECT column\_name(s) FROM table\_name WHERE column\_name operator value |  |  |
|  |  |  |  |

WHERE SYNTAXES

|  |  |  |
| --- | --- | --- |
| WHERE | SYNTAX | EXAMPLE |
|  |  |  |
| WHERE clause | SELECT column1, column2, ... FROM table\_name WHERE condition; | SELECT \* FROM Customers WHERE Country='Mexico'; |
|  |  |  |
| Text Fields vs. Numeric Fields | SELECT \* FROM Customers WHERE Country='Mexico';  SELECT \* FROM Customers WHERE CustomerID=1; |  |
|  |  |  |
| Equal = | SELECT \* FROM Products  WHERE Price = 18; | SELECT \* FROM Products  WHERE Price = 18; |
|  |  |  |
| Greater than or equal >= | SELECT \* FROM Products  WHERE Price > 30; | SELECT \* FROM Products  WHERE Price >= 30; |
|  |  |  |
| Less than or equal  <= |  | SELECT \* FROM Products  WHERE Price <= 30; |
|  |  |  |
| Not equal. <>  != |  | SELECT \* FROM Products  WHERE Price <> 18; |
|  |  |  |
|  |  |  |
| BETWEEN |  | SELECT \* FROM Products  WHERE Price BETWEEN 50 AND 60; |
|  |  |  |
| LIKE |  | SELECT \* FROM Customers  WHERE City LIKE 's%'; |
|  |  |  |
| IN |  | SELECT \* FROM Customers  WHERE City IN ('Paris','London'); |
|  |  |  |
| **AND SyntaX** | SELECT column1, column2, ... FROM table\_name WHERE condition1 AND condition2 AND condition3 ...; | SELECT \* FROM Customers WHERE Country='Germany' AND City='Berlin'; |
|  |  |  |
| **OR Syntax** | SELECT column1, column2, ... FROM table\_name WHERE condition1 OR condition2 OR condition3 ...; | SELECT \* FROM Customers WHERE City='Berlin' OR City='München'; |
|  |  |  |
| **NOT Syntax** | SELECT column1, column2, ... FROM table\_name WHERE NOT condition; | SELECT \* FROM Customers WHERE NOT Country='Germany'; |
|  |  |  |
| Combining AND, OR and NOT |  | SELECT \* FROM Customers WHERE Country='Germany' AND (City='Berlin' OR City='München');  SELECT \* FROM Customers WHERE NOT Country='Germany' AND NOT Country='USA'; |
|  |  |  |
|  |  |  |