w3schools.com THE WORLD'S LARGEST WEB DEVELOPER SITE

SQL AUTO INCREMENT Field

AUTO INCREMENT Field

Auto-increment allows a unique number to be generated automatically when a new record is inserted into a table.

Often this is the primary key field that we would like to be created automatically every time a new record is inserted.

Syntax for MySQL

The following SQL statement defines the "Personid" column to be an auto-increment primary key field in the "Persons" table:

```
CREATE TABLE Persons (
    Personid int NOT NULL AUTO_INCREMENT,
    LastName varchar(255) NOT NULL,
    FirstName varchar(255),
    Age int,
    PRIMARY KEY (Personid)
);
```

COLOR PICKER
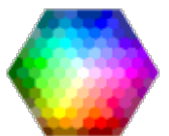
HOW TO

MySQL uses the AUTO_INCREMENT keyword to perform an auto-increment feature.

By default, the starting value for AUTO_INCREMENT is 1, and it will increment by 1 for each new record.

To let the AUTO_INCREMENT sequence start with another value, use the following SQL statement:

```
ALTER TABLE Persons AUTO_INCREMENT=100;
```

To insert a new record into the "Persons" table, we will NOT have to specify a value for the "Personid" column (a unique value will be added automatically):

```
INSERT INTO Persons (FirstName,LastName)
VALUES ('Lars','Monsen');
```

The SQL statement above would insert a new record into the "Persons" table. The "Personid" column would be assigned a unique value. The "FirstName" column would be set to "Lars" and the "LastName" column would be set to "Monsen".

Syntax for SQL Server

The following SQL statement defines the "Personid" column to be an auto-increment primary key field in the "Persons" table:

```
CREATE TABLE Persons (
    Personid int IDENTITY(1,1) PRIMARY
KEY,
```

Tabs
Dropdow
Accordion
Side
Navigatio
Top
Navigatio
Modal
Boxes
Progress
Bars
Parallax
Login
Form
HTML
Includes
Google
Maps
Range
Sliders
Tooltips
Slideshov
Filter
List
Sort
List

SHARE

CERTIFIC

HTML
CSS
JavaScript
SQL
Python
PHP

```
      LastName varchar(255) NOT NULL,
      FirstName varchar(255),
      Age int
);
```

The MS SQL Server uses the IDENTITY keyword to perform an auto-increment feature.

In the example above, the starting value for IDENTITY is 1, and it will increment by 1 for each new record.

Tip: To specify that the "Personid" column should start at value 10 and increment by 5, change it to IDENTITY(10,5).

To insert a new record into the "Persons" table, we will NOT have to specify a value for the "Personid" column (a unique value will be added automatically):

```
INSERT INTO Persons (FirstName,LastName)
VALUES ('Lars','Monsen');
```

The SQL statement above would insert a new record into the "Persons" table. The "Personid" column would be assigned a unique value. The "FirstName" column would be set to "Lars" and the "LastName" column would be set to "Monsen".

Syntax for Access

The following SQL statement defines the "Personid" column to be an auto-increment primary key field in the "Persons" table:

```
CREATE TABLE Persons (
```

```
    Personid AUTOINCREMENT PRIMARY KEY,
    LastName varchar(255) NOT NULL,
    FirstName varchar(255),
    Age int
);
```

The MS Access uses the AUTOINCREMENT keyword to perform an auto-increment feature.

By default, the starting value for AUTOINCREMENT is 1, and it will increment by 1 for each new record.

Tip: To specify that the "Personid" column should start at value 10 and increment by 5, change the autoincrement to AUTOINCREMENT(10,5).

To insert a new record into the "Persons" table, we will NOT have to specify a value for the "Personid" column (a unique value will be added automatically):

```
INSERT INTO Persons (FirstName,LastName)
VALUES ('Lars','Monsen');
```

The SQL statement above would insert a new record into the "Persons" table. The "Personid" column would be assigned a unique value. The "FirstName" column would be set to "Lars" and the "LastName" column would be set to "Monsen".

Syntax for Oracle

In Oracle the code is a little bit more tricky.

You will have to create an auto-increment field with the sequence object (this object generates a number sequence).

Use the following CREATE SEQUENCE syntax:

```
CREATE SEQUENCE seq_person
MINVALUE 1
START WITH 1
INCREMENT BY 1
CACHE 10;
```

The code above creates a sequence object called seq_person, that starts with 1 and will increment by 1. It will also cache up to 10 values for performance. The cache option specifies how many sequence values will be stored in memory for faster access.

To insert a new record into the "Persons" table, we will have to use the nextval function (this function retrieves the next value from seq_person sequence):

```
INSERT INTO Persons
(Personid,FirstName,LastName)
VALUES
(seq_person.nextval,'Lars','Monsen');
```

The SQL statement above would insert a new record into the "Persons" table. The "Personid" column would be assigned the next number from the seq_person sequence. The "FirstName" column would be set to "Lars" and the "LastName" column would be set to "Monsen".

‹ Previous   Next ›

REPORT ERROR   PRINT PAGE   FORUM   ABOUT

Top Tutorials

HTML Tutorial
CSS Tutorial
JavaScript Tutorial
How To Tutorial
SQL Tutorial
Python Tutorial
W3.CSS Tutorial
Bootstrap Tutorial
PHP Tutorial
jQuery Tutorial
Java Tutorial
C++ Tutorial

Top References

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
jQuery Reference
Java Reference
Angular Reference

Top Examples

HTML Examples
CSS Examples
JavaScript Examples
How To Examples
SQL Examples
Python Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
jQuery Examples
Java Examples
XML Examples

Web Certificates

HTML Certificate
CSS Certificate
JavaScript Certificate
SQL Certificate
Python Certificate
jQuery Certificate
PHP Certificate
Bootstrap Certificate
XML Certificate

Get Certified »