

SQL AUTO INCREMENT Field

[< Previous](#)[Next >](#)

AUTO INCREMENT Field

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

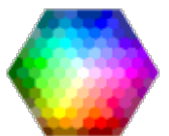
Often this is the primary key field that we would like to be created automatically every time a new record is inserted.

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
Dropdown
Accordion
Side
Navigation
Top
Navigation
Modal
Boxes
Progress
Bars
Parallax
Login
Form
HTML
Includes
Google
Maps
Range
Sliders
Tooltips
Slideshow
Filter
List
Sort
List

SHARE



CERTIFIC

HTML
CSS
JavaScript
SQL
Python
PHP

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

jQuery
Bootstrap
XML

[Read More](#)

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.

[HTML](#)[CSS](#)[JAVASCRIPT](#)[SQL](#)[PYTHON](#)[PHP](#)[BOOTSTRAP](#)

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 INT IDENTITY(1,1) PRIMARY KEY,  
    LastName varchar(255) NOT NULL,  
    FirstName varchar(255),  
    Age int  
);
```

SQL Comments

SQL Database

SQL Create DB

SQL Drop DB

SQL Backup DB

SQL Create Table

SQL Drop Table

SQL Alter Table

SQL Constraints

SQL Not Null

SQL Unique

SQL Primary Key

SQL Foreign Key

SQL Check

SQL Default

SQL Index

SQL Auto Increment

SQL Dates

SQL Views

SQL Injection

SQL Hosting

SQL References

SQL Keywords

MySQL Functions

SQL Server Functions

MS Access Functions

SQL Operators

SQL Data Types

SQL Quick Ref

SQL Examples

SQL Examples

SQL Quiz

SQL Exercises

SQL Certificate

```
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	Top	Top	Web
	References	Examples	Certificates
HTML Tutorial	HTML Reference	HTML Examples	HTML Certificate
CSS Tutorial	CSS Reference	CSS Examples	CSS Certificate
JavaScript Tutorial	JavaScript Reference	JavaScript Examples	JavaScript Certificate
How To Tutorial	SQL Reference	How To Examples	SQL Certificate
SQL Tutorial	Python Reference	SQL Examples	Python Certificate
Python Tutorial	W3.CSS Reference	Python Examples	jQuery Certificate
W3.CSS Tutorial	Bootstrap Reference	W3.CSS Examples	PHP Certificate
Bootstrap Tutorial	PHP Reference	Bootstrap Examples	Bootstrap Certificate
PHP Tutorial	HTML Colors	jQuery Examples	XML Certificate
jQuery Tutorial	jQuery Reference	Java Examples	
Java Tutorial	Java Reference	XML Examples	
C++ Tutorial	Angular Reference		Get Certified »

W3Schools is optimized for learning, testing, and training. Examples might be simplified to improve reading and basic understanding. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using this site, you agree to have read and accepted our terms of use, cookie and privacy policy. Copyright 1999-2019 by Refsnes Data. All Rights Reserved.

Powered by W3.CSS.

