# Reading: Examples to ALTER and TRUNCATE tables using MySQL

Estimated time to complete: 5 minutes

In the previous video, the ALTER and TRUNCATE syntax applies to DB2. There are variations in syntax between different databases. This reading will explore some examples of ALTER and TRUNCATE statements using MySQL.

#### Objective(s)

At the end of this reading, you will be able to:

- Use the ALTER TABLE statement in the correct syntax.
- Use TRUNCATE statements in syntax.
- Execute examples of ALTER and TRUNCATE statements.

## **ALTER TABLE**

ALTER TABLE statements can be used to add or remove columns from a table, to modify the data type of columns, to add or remove keys, and to add or remove constraints. The syntax of the ALTER TABLE statement is:

#### ADD COLUMN syntax

- 1. 1
- 1. ALTER TABLE table name
- ADD column\_name data\_type;

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A variation of the syntax for adding column is:

- 1. 1
- 2. 2
- 1. ALTER TABLE table\_name
- ADD COLUMN column\_name data\_type;

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By default, all the entries are initially assigned the value NULL. You can then use UPDATE statements to add the necessary column values.

For example, to add a telephone\_number column to the author table in the library database, the statement will be written as:

- 1. 1
- 1. ALTER TABLE author
- ADD telephone\_number BIGINT;

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Here, BIGINT is a data type for Big Integer.

After adding the entries to the new column, a sample output is shown below.

author_id	lastna me	firstna me	email	city	country	telepho ne_numb er
1001	Thomas	John	johnt@	New York	USA	5551111
1002	James	Alice	alicej@	Seattle	USA	5551112
1003	Wells	Steve	stevew:@	Montreal	Canada	5552222
1004	Kumar	Santosh	kumars@	London	UK	5553333

#### Modify column data type

- 1. 1
- 1. ALTER TABLE table\_name
- MODIFY column\_name data\_type;

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Sometimes, the data presented may be in a different format than required. In such a case, we need to modify the data\_type of the column. For example, using a **numeric** data type for **telephone\_number** means you cannot include **parentheses**, **plus signs**, or **dashes as part of the number**. For such entries, the appropriate choice of data\_type is CHAR.

To modify the data type, the statement will be written as:

- 1. 1
- 1. ALTER TABLE author
- MODIFY telephone\_number CHAR(20);

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The entries can then be updated using UPDATE statements. An updated version of the "author" table is shown below.

author_id	lastna me	firstna me	email	city	country	telepho ne_numb er
1001	Thomas	John	johnt@	New York	USA	555-1111
1002	James	Alice	alicej@	Seattle	USA	555-1112
1003	Wells	Steve	stevew@	Montreal	Canada	555 - 2222
1004	Kumar	Santosh	kumars@	London	UK	555-3333

## **TRUNCATE Table**

TRUNCATE TABLE statements are used to delete all of the rows in a table. The syntax of the statement is:

- 1. :
- TRUNCATE TABLE table\_name;

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So, to truncate the "author" table, the statement will be written as:

- 1. 1
- 1. TRUNCATE TABLE author;

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The output would be as shown in the image below.

author_id	lastna me	firstna me	email	city	country

Note: The TRUNCATE statement will delete the rows and not the table.

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