

LAB - Alter Table - Add Column

In this lab, you will learn how to use the SQL Server `ALTER TABLE ADD` statement to add one or more columns to a table.

The following `ALTER TABLE ADD` statement appends a new column to a table:

```
ALTER TABLE table_name
ADD column_name data_type column_constraint;
```

In this statement:

- First, specify the name of the table in which you want to add the new column.
- Second, specify the name of the column, its data type, and constraint if applicable.

If you want to add multiple columns to a table at once using a single `ALTER TABLE` statement, you use the following syntax:

```
ALTER TABLE table_name
ADD
    column_name_1 data_type_1 column_constraint_1,
    column_name_2 data_type_2 column_constraint_2,
    ...,
    column_name_n data_type_n column_constraint_n;
```

In this syntax, you specify a comma-separated list of columns that you want to add to a table after the `ADD` clause.

Note that SQL Server doesn't support the syntax for adding a column to a table after any specific existing column.

Examples

The following statement creates a new table named `sales.quotations`:

```
CREATE TABLE sales.quotations (
    quotation_no INT IDENTITY PRIMARY KEY,
    valid_from DATE NOT NULL,
    valid_to DATE NOT NULL
);
```

To add a new column named `description` to the `sales.quotations` table, you use the following statement:

```
ALTER TABLE sales.quotations
ADD description VARCHAR (255) NOT NULL;
```

The following statement adds two new columns named `amount` and `customer_name` to the `sales.quotations` table:

```
ALTER TABLE sales.quotations
ADD
    amount DECIMAL (10, 2) NOT NULL,
    customer_name VARCHAR (50) NOT NULL;
```

In this lab, you have learned how to use the SQL Server `ALTER TABLE ADD` statement to add one or more columns to a table.