

Alias Syntax

In this lesson, we will learn about assigning aliases to tables and columns.

We'll cover the following

- Alias syntax
 - Syntax of a table alias
 - Example
 - Syntax for a column alias
 - EXAMPLE
 - Quick quiz!

Alias syntax

You can rename a table or a column temporarily by giving another name known as an **Alias**. The use of table aliases is to rename a table in a specific SQL statement. Column aliases are used to rename a table's columns for a particular SQL query. This renaming is a temporary change and the actual table/column name does not change in the database.

Syntax of a table alias

The basic syntax of a `table alias` is as follows:

```
SELECT column1, column2 ... columnN

FROM table_name AS alias_name

WHERE condition;
```

Example

For our example, we will be using the following tables:

Customer Table

ID	NAME	AGE	ADDRESS	SALARY
1	Mark	32	Texas	50,000
2	John	25	NY	65,000
3	Emily	23	Ohio	20,000
4	Bill	25	Chicago	75,000
5	Tom	27	Washington	35,000
6	Jane	22	Texas	45,000

Orders Table

ORDER_ID	DATE	CUSTOMER_ID	AMOUNT
100	2019-09-08	2	5000
101	2019-08-20	5	3000
102	2019-05-12	1	1000
103	2019-02-02	2	2000

```

/* This is the same table we created in the previous lessons.*/
CREATE TABLE CUSTOMERS(
  ID      INT             NOT NULL,
  NAME    VARCHAR (20)    NOT NULL,
  AGE     INT             NOT NULL,
  ADDRESS CHAR (25) ,
  SALARY  DECIMAL (18, 2), /* The (18,2) simply means that we can have 18 digits with 2 of
  PRIMARY KEY (ID)
);

```



```

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (1, 'Mark', 32, 'Texas', 50000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (2, 'John', 25, 'NY', 65000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (3, 'Emily', 23, 'Ohio', 20000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (4, 'Bill', 25, 'Chicago', 75000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (5, 'Tom', 27, 'Washington', 35000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (6, 'Jane', 22, 'Texas', 45000.00 );

/*We will now create the ORDERS table*/
CREATE TABLE ORDERS(
  ORDER_ID   INT           NOT NULL,
  DATE       VARCHAR (20)  NOT NULL,
  CUSTOMER_ID INT         NOT NULL,
  AMOUNT     INT,
  PRIMARY KEY (ORDER_ID),
  FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMERS(ID) /* We must specify the table to which th
);

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (100, '2019-09-08', 2, 5000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (101, '2019-08-20', 5, 3000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (102, '2019-05-12', 1, 1000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (103, '2019-02-02', 2, 2000 );

SELECT C.ID, C.NAME, C.AGE, O.AMOUNT
FROM CUSTOMERS AS C, ORDERS AS O
WHERE C.ID = O.CUSTOMER_ID;

```



As you can see in the code above, we temporarily assigned a new alias **C** to the CUSTOMERS table and **O** to the ORDERS table.

Furthermore, when working with two tables, we need to specify the table name from which the column is derived, therefore having short aliases helps us to avoid writing large names before each column name. Also, sometimes tables can have the same column names so specifying the table name before the column name helps to avoid confusion regarding which table we are

the column name helps to avoid confusion regarding which table we are referring to.

In the highlighted lines above, the query simply displays the relevant fields we have selected based on the condition that `ID` in the `CUSTOMERS` table is equal to `ORDER_ID` in `ORDERS` table. So the result-set is the group of people who have placed orders.

Syntax for a column alias

The basic syntax of a `column alias` is as follows:

```
SELECT column_name AS alias_name

FROM table_name

WHERE condition;
```

EXAMPLE

Following is the usage of a `column alias`.

```
/* This is the same table we created in the previous lessons.*/
CREATE TABLE CUSTOMERS(
  ID   INT             NOT NULL,
  NAME VARCHAR (20)     NOT NULL,
  AGE  INT             NOT NULL,
  ADDRESS CHAR (25) ,
  SALARY DECIMAL (18, 2), /* The (18,2) simply means that we can have 18 digits with 2 of
  PRIMARY KEY (ID)
);

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (1, 'Mark', 32, 'Texas', 50000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (2, 'John', 25, 'NY', 65000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (3, 'Emily', 23, 'Ohio', 20000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (4, 'Bill', 25, 'Chicago', 75000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (5, 'Tom', 27, 'Washington', 35000.00 );

INSERT INTO CUSTOMERS (ID, NAME, AGE, ADDRESS, SALARY)
VALUES (6, 'Jane', 22, 'Texas', 45000.00 );

/*We will now create the ORDERS table*/
CREATE TABLE ORDERS(
  ORDER ID   INT             NOT NULL,
```

```

ORDER_ID INT NOT NULL,
DATE VARCHAR (20) NOT NULL,
CUSTOMER_ID INT NOT NULL,
AMOUNT INT,
PRIMARY KEY (ORDER_ID),
FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMERS(ID) /* We must specify the table to which th
);

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (100, '2019-09-08', 2, 5000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (101, '2019-08-20', 5, 3000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (102, '2019-05-12', 1, 1000 );

INSERT INTO ORDERS (ORDER_ID, DATE, CUSTOMER_ID, AMOUNT)
VALUES (103, '2019-02-02', 2, 2000 );

SELECT ID AS CUSTOMER_ID, NAME AS CUSTOMER_NAME
FROM CUSTOMERS
WHERE SALARY > 40000.00;

```



As you can see in the output above, the column names have changed.

A **column alias** is particularly useful when we want to change the name of a column to one that is easier to understand for the user.

Quick quiz!

Q

The following query will change the name of the column **ID** to **CUSTOMER_ID**

```

SELECT ID , NAME AS CUSTOMER_NAME
FROM CUSTOMERS AS CUST

```



A) True



B) False

In the next lesson, we will learn to combine two different tables using joins.