Querying with SQL

Useful tools in SQL

Useful tools

alx

Often, SQL result sets are made to examine a subset of data. Here are two handy tools we can use to make them readable, and save results for future use.

We often draw upon different databases and tables which may have complex column names. The SQL keyword **AS** is a handy tool to rename columns in a query **result**.

At times, it is useful to save results so we can access them later. **INSERT INTO** can be used to save a query as well. Instead of specifying **VALUES**, we use a query.

Aliasing

Aliasing is a technique that uses the **AS** keyword to **temporarily rename** a table or column in a query for simplification and readability.

Syntax: `SELECT col_name_in_db AS new_col_name FROM db.table;`

Table_2

col1	col2	col3
z	68	s
x	1	l
w	7	l
y	56	m

```
SELECT
        col1 AS Initials
        col2,
        col3,
FROM
        db.Table_2;
```

Results

Initials	col2	col3
z	68	s
x	1	l
w	7	l
y	56	m

Aliasing

You cannot rename a column with **AS** and use the alias in a **WHERE** clause.

AS creates an **alias** or shortcut name for a column **in an SQL results set**. Renaming columns in a results set makes the table **more readable**.
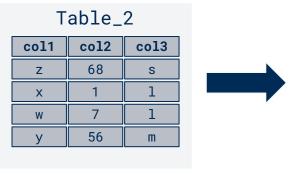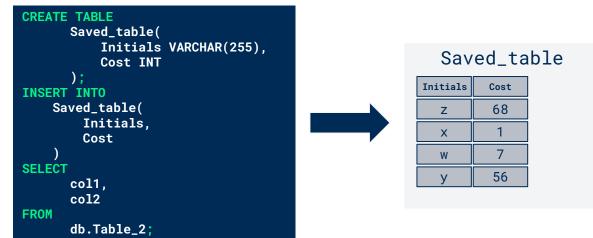
Always choose **descriptive names** such as `first_name`, `last_name` instead of `name`, and `is_subscribed` instead of `sub`.

Saving a results set in a table

alx

To save useful results as a table, we can use **INSERT INTO** to save the results of a query to an **existing** table.

Syntax: `INSERT INTO table_name(col_name(s)) SELECT col(s) FROM db_name.table_name;`

Table_2

col1	col2	col3
z	68	s
x	1	l
w	7	l
y	56	m

```
CREATE TABLE
       Saved_table(
           Initials VARCHAR(255),
           Cost INT
       );
INSERT INTO
    Saved_table(
        Initials,
        Cost
    )
SELECT
       col1,
       col2
FROM
       db.Table_2;
```

Saved_table

Initials	Cost
z	68
x	1
w	7
y	56

Saving a results set in a table

alx

This involves three steps:

```
CREATE TABLE
     Saved_table(
     Initials VARCHAR(255),
     Cost INT
     );
```

```
INSERT INTO
     Saved_table(
     Initials,
     Cost
     );
```

```
SELECT
     col1,
     col2
FROM
     db.Table_2;
```

1. Create a new table called Saved_table, with Initials and Cost as the column names.

2. Query the columns/data we want to save (**SELECT** col1 and col2).

3. Insert the results of the query (col1 and col2) into the new table (Initials and Cost) – **INSERT INTO**.