

This page describes how to insert, update, and delete data using the `gcloud (/sdk/)` command-line tool.

To execute Data Manipulation Language (DML) statements, use the `gcloud spanner databases execute-sql` command . The following example adds a new row to the `Singers` table.

To execute a Partitioned DML statement, use the `gcloud spanner databases execute-sql` command with the `--enable-partitioned-dml` option. The following example updates rows in the `Albums` table.

Cloud Spanner does not support `--query-mode=PLAN` and `--query-mode=PROFILE` for Partitioned DML.

For the Cloud Spanner DML reference, see [Data Manipulation Language syntax \(/spanner/docs/dml-syntax\)](/spanner/docs/dml-syntax).

Use the `gcloud spanner rows` command group to modify data in a database:

- Insert new rows into a table.
- Update columns in existing rows in a table.

- Delete rows from a table.

The `rows` command group recognizes literals for all valid column types (</spanner/docs/data-types#allowable-types>).

To insert a new row in a table, you must include values for the key columns and any other required columns:

The following example inserts a new row in the `Singers` table:

To update a row in a table, you must include values for the key columns and the columns you want to update:

The following example updates a row in the `Singers` table:

You cannot change the key values using the `update` command. To update a key value, you must create a new row and delete the existing row.

To delete a row, you must specify the values for the primary key columns:

The following example deletes a row from the ``Singers`` table:

To insert or update values in an `ARRAY` column (/spanner/docs/arrays), put the data in a YAML file and use the `--flags-file` (/sdk/gcloud/reference/topic/flags-file) option.

For example, this YAML file specifies the array `[1, 2, 3]` for the `Numbers` column:

To insert a row with the YAML data, use the `--flags-file` option:

For a `NULL` array, don't include a value for `Numbers` in the file:

For an empty array, define the array as `[]`:

To insert or update a value automatically in a `commit_timestamp` (/spanner/docs/commit-timestamp) column, pass `spanner.commit_timestamp()` as the value of the column. The following example writes the commit timestamp in the `LastUpdated` column when the row is inserted.

The following example writes a specific timestamp value in the `LastUpdated` column:

