

# Korea University MatKor – Make a Simple SQLite using C++

## Week 2 – Assignment #1

Due: Wednesday, May 21 2025 at 11:59pm KST

### 1. Read Data from a Single Column

- Now that you're comfortable with jumping across database pages, let's dig a little deeper and read data from rows in a table.
- Here's how to test
  - o `./sqlite.exe sample.db "SELECT name FROM apples"`
- Here's the output it expects:
  - o The order of rows returned doesn't matter.

Granny Smith

Fuji

Honeycrisp

Golden Delicious

- Rows are stored on disk in the Record Format<sup>1</sup>, which is just an ordered sequence of values. To extract data for a single column, you'll need to know the order of that column in the sequence. You'll need to parse the table's `CREATE TABLE` statement to do this. The `CREATE TABLE` statement is stored in the `sqlite_schema`<sup>2</sup> table's `sql` column.

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<sup>1</sup> [https://www.sqlite.org/fileformat.html#record\\_format](https://www.sqlite.org/fileformat.html#record_format)

<sup>2</sup> <https://www.sqlite.org/schematab.html>