

Services

How to stop and start

Github -

Make it private and add me as collab (checkout github permissions and etc)

(my github : munkeops)

Data types:

https://www.w3schools.com/sql/sql_datatypes.asp

Constraints :

[MySQL CHECK Constraint](#)

Default, check etc

Tables :

A Government needs to keep records of all people in the country. There are many real life use cases that depend on this data. US - social security number , India- aadhar card. Suppose we were designing a database to handle this data.

Similarly when and if you have visited the aadhar website you can link your driving license so let's design a driving license table.

AADHAR TABLE

Schema : name, aadhar no, dob, dod, city

What are the conditions we need to put on these columns:

Aadhar num - primary, 7 digit long (char cause not performing any math)

Name - not null, not unique, automatically not primary (please tell me this makes sense)

DOB - Date (Note : we know that age is a very bad data value to keep, why ?)

DOD- Date

DRIVING LICENSE

Schema : name, phno, DOB, DOI (date of issue), car, gbike, ngbike, truck, auto
Name, phno, DOB, DOI, car gbike, ngbike, truck, auto

Operations with select (tips and tricks) :

Concat, addition etc

ALTER and UPDATE:

Alter : table schema

Update : row values

Alter - add column, rename column, modify, default

Suppose all the data we had till now was only name and DOB. Then the government realised we must keep gender, furthermore they realised we must also keep phone numbers as that's an emerging data that is gonna be available to everyone (assuming we are in the 2005 since it's already become a thing).

Suppose the govt database now has data about people's gender and phone number.

So now what should we create a new table? Of course not as the name suggests we can simply alter the table and update the values. As said earlier the schema defines the data the table will store. So the first step is to alter the schema to accommodate new data.

Let's see how we do it.

LIKE

Very useful when wanting to do pattern matching with text/char/numbers.

Let follow some data creation, suppose we alter the table to contain values of pincode of the location the person has his permanent address at.

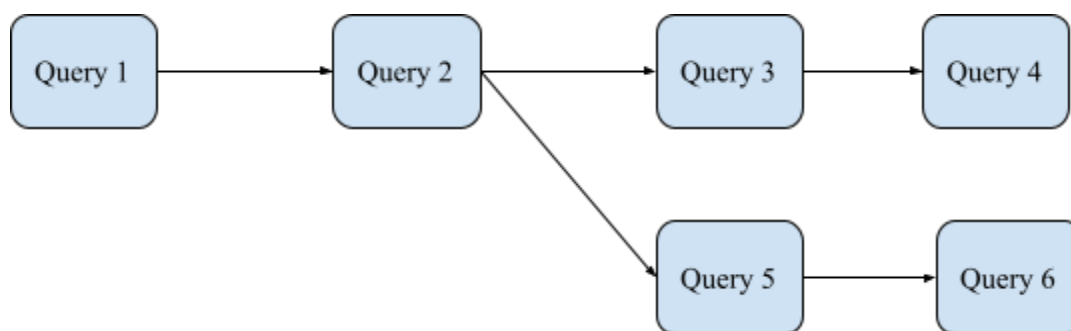
Aggregate functions:

Count Sum Avg Min Max

There are more like round etc but may not be standard across all vendors (check them out later)

Query within a Query (Sub query)

Suppose the table has too much information and your data needs something like a pipeline (filters). What that means is, I wanna make a query and get some rows and tables, then I wanna put many more queries on that again. (We will talk about proper aggregation/pipelining later in depth)



IN

Facilitates subqueries. But not just used for subqueries.

Date

MySQL comes with the following data types for storing a date or a date/time value in the database:

- DATE - format YYYY-MM-DD
- DATETIME - format: YYYY-MM-DD HH:MI:SS
- TIMESTAMP - format: YYYY-MM-DD HH:MI:SS
- YEAR - format YYYY or YY

AS (Aliases)

Creating a temporary column or an alias for a column is very useful when we discuss about pipelines

Basic Syntax:

For column alias:

```
SELECT column as alias_name FROM table_name;
```

column: fields in the table

alias_name: temporary alias name to be used in replacement of original column name

table_name: name of table

For table alias:

```
SELECT column FROM table_name as alias_name;
```

column: fields in the table

table_name: name of table

alias_name: temporary alias name to be used in replacement of original table name