~~DAY FOURTEEN ONE~~ XIII

(SQL) DAY ONE (basic) as

① SQL keyword: Select ... from ... where ...

Select distinct : (return only distinct (different) values).

operator: =, <>, >, <, >=, <=, BETWEEN, LIKE, IN.

And, Or, Not, ~~SORT BY~~ ORDER BY ... ASC/DESC

② Insert into ... value (...), IS NULL, IS NOT NULL

Update ... set ... where ..., delete from ... where ...

③ select top ... | percent ... from ...

DAY TWO (functions and operators)

① MIN(), MAX(), COUNT(), AVG(), SUM()

② LIKE operator: % - represent 0, 1, or multiple characters.

_ - represents single character.

③ In operator: specify multiple values in a WHERE clause.

④ between operator: selects values with a given range (inclusive).

P.S. ① ALTER TABLE xxx

ADD COLUMN ... AFTER ...;

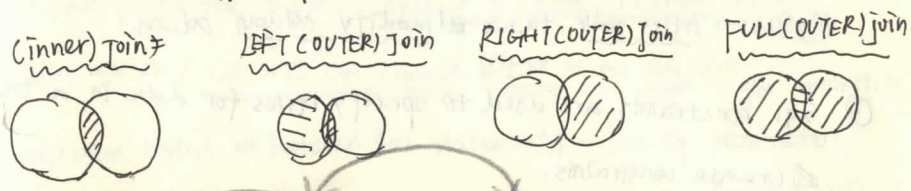
② show columns from users.

DAY THREE (JOIN):

① JOIN clause is used to combine rows from two or more tables.

based on a related column between them.

② four different types of SQL JOINS:



③ Syntax: select ... from ... inner join ... on ....

DAY FOUR (group)

① union operator is used to combine the result-set of two or more select statements. (same number of columns and have similar data types)

union all is used to allow duplicate values.

② group by statement is often used with aggregate functions.

Select ... from ... where ... group by col_na

③ HAVING clause. ... group by col_na having condition subquery

④ EXISTS is used to test for the existence of any record in a sub.

ANY returns true if one .... All returns true if all ...

⑤ select * ... into newtable [in externaldb] ....

⑥ Insert into ... select .... ⑦ sql IFNULL(), ISNULL(), COALESCE() and NVL() functions. ⑧ -- Comments

DAY FIVE (Database)

① create database .. ; drop database ..; create a table ..;

drop table ..... ; After table ... add col_name/ drop col_name

MySQL → After table . ta_na ~~ad~~ modify column col_na;

② Sql constraints are used to specify rules for data in a table.

create constraints.

constraints type : NOT NULL , UNIQUE , PRIMARY KEY . FOREIGH KEY . CHECK (ensures that all values in a column satisfies a specific condition) .. DEFAULT . INDEX .

Used to create and retrieve data from the database very quickly

* CHECK : eg :- ALTER TABLE persons ADD CHECK (Age >= 18)

Or you can name it - ALTER TABLE persons ADD CONSTRANT ... CHECK ...

drop a constraint - ALTER TABLE persons DROP CHECK CHK ....

* INDEX :- CREAT INDEX Statement is used to create indexes in tables.

Syntax : CREAT INDEX ind_na ON ta_na (col1, col2 ...)

- CREAT UNIQUE INDEX : CREAT UNIQUE INDEX in_na on ta_na (...)

- DROP INDEX (MySQL) : ALTER TABLE ta_na DROP TABLE in_na

④ * AUTO INCREMENT : add AUTO_INCREMENT keyword when defined.

or we can specify : ALTER TABLE persons AUTO_INCREMENT = 100

⑤ Dates : MySQL : DATE . DATETIME . TIMESTAMP . YEAR.

DAY SIX (ADVANCE)

① SQL views : SYNTAX : CREATE VIEW vi_na AS SELECT col1, col2, ... #MARK

* Note : A view always shows up-to-date data.

* USAGE : assuming # vi_na = [Current PList]

we can query the view : Select * FROM [Current PList]

- updating a view : CREATE OR Replace VIEW vi_na AS .... for protection

② SQL injection based on batched SQL statements → use sql parameters ✓.

③ Hosting : If your web sever is hosted by an Internet Service Provider (ISP).

you will have to look for SQL hosting plans.

DAY SEVEN (REFRENCE) :