13th September 2024

① SQL server management studio - 19 community version. 19.1 version.

New Query

Search on ° (chrome): sql server mangement studio. download 19.1: SSMS.

what is data in db?

data - unprocessed. information - data processed.

Systematic way arrangement

database: organised collection of data. easy access, update, managed.

MySQL and SQL Server:

Download Direction.
SSL server management studio!
Download SSL server management studio: community Edition.

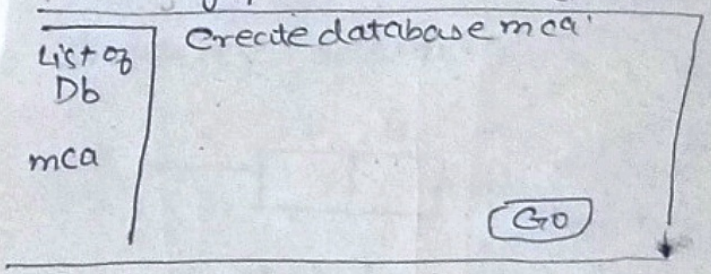
Commands: [MySQL - Xampp]
download xampp.

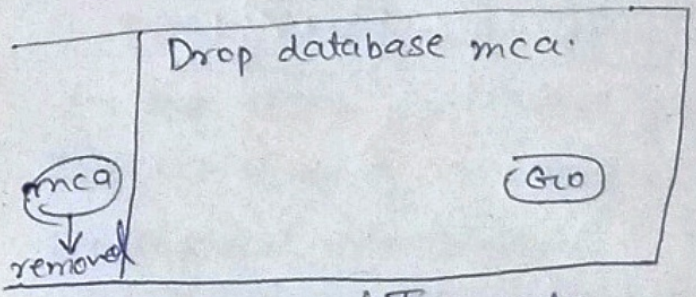
Q. How to create a database?
~~create~~ Keyword is in capital. → dbname;
CREATE DATABASE cimage;

Q How to delete a database?
DROP DATABASE cimage;

DELETE, DROP, TRUNCATE (Difference?)

click on go/ctrl+enter Create.





Student

roll	Name
1	a
2	b
3	c
→ 4	d

✓ will delete the record.

Delete, Drop and Truncate

Delete	Drop	Truncate
It is used to delete a ~~record~~ particular record. eg. DELETE FROM Students where roll no = 4 ✓	It deletes record as well as structure All not get this permission. Structure + record all is deleted. Permanent ~~delete~~ delete.	Truncate is used to delete all records at a time. TRUNCATE TABLE Students;
DELETE From Students will completely delete. (iii) Delete from students where roll no in (1,3,5,7);		

20.09.24.

1) Open SSms → click on connect

2) click on :
New Query.

DBms:

create table employee (ID_int, name varchar(30))

Control Enter

=> insert into Students (id, Sname) value (1, 'Jaswar);

=> Select * from student;

23.09.2024.

RDBMS:

① Structured and Unstructured Db.
Unstructured db has NoSQL format

② BIG Data ✓
MongoDb. ✓

③. [Practical]: SQL server

(i) Open start and search: SQL Server management Studio: 19. click to open.

(ii) connect + Database engine + windows Authentication.

(iii) click on new query execute/F5

(iv) SQl Query

1. create database mca1 (click F5).

executed succesfully.

2. CREATE DATABASE mca2
select command 2 and click on execute.

master ✓ mca1 ✓

use mca1;

3. create table students(
ID int primary key, → constraints.
sname varchar(30) not null, primary key will not let to duplicate
age int); select query and click id.
on execute.

4. (i) insert into students
(ii) (ID, sname, age) values (1, 'satyam', 20);
insert into students values
(2, Istiyak, 20);

(iii)

(iii) insert into students(ID, name, age)
values(4,'Ravi',21),(5,'Arshad',21).

5. select * from students. (select and execute).

Install ~~mysql~~ mssql

27.09.2024 RDBMS.

Database, Create ☑, Delete ☑, use ☑

Use CImage; To select the database.

```
Create table tablename (
    column1 datatype constraints,
    column2 datatype constraints,
    :
    columnn -- datatype - constraints);
```

Insert

(i) Single record ☑

(ii) → Insert into tablename (column1, column2 ... n)
values ("first value", "second value" ..... "n value");
Specify column name

→ Insert into tablename values (firstvalue, secondvalue, ... nvalue);

Constraints, numbers, meaning :

Constraints : Rules on Table.

① Primary Key :
(i) It checks the duplicacy. not allow duplicate value.
(ii) It does not allow the null value.
Data redundancy : data duplicacy.
(iii) Only 1 primary key can be defined in a table.

② Unique : it uniquely identify a column.
It allow use of null value (may or diff. from Primary key).
There may be many column that uniquely identify a row. It allows ~~one~~ null value.
Eg. email, mobile number,
Out of many, we select one as Primary key.
~~Only~~ Only 1 primary key.
Unique + not null → Primary key.

③ Null : not mandatory, It is not mandatory / necessary to fill the required column like address in a student table.

eg. of Primary Key
→ id int PRIMARY KEY.

eg. of ~~Null~~ unique
→ email varchar(30) UNIQUE;

eg. of Null.
→ address varchar(50) NULL,

col.name datatype (size) → constraints;

(iv) NOTNULL
Like Require. in the HTML form.
It does not allow null value.
→ eg. name varchar(30) NOT NULL;

(v) Default: It is used to define a default country or a city in a table.
eg. city varchar(30) DEFAULT ("Patna");

(vi) Check constraint: It is used to check the value when user enter.
eg age int check (age>18);

(vii) F.K is the reference of Primary key in the table.

use cimage
Create table customer(
Id int P.K,
Cname varchar(30) not null,
address varchar(100) null
city varchar(30) default 'Patna',
email varchar(55) unique));

Certification & Training