

## SQL (Structured query language)

its language for managing relational database.

## DBMS (Database management system)

it software which is used to manage the database.

## RDBMS ( Relational Database management System )

RDBMS is a type of database management system.

\* store data

\* what is difference between database and table

⇒ database is collection of table where as table is collection of rows and columns.

datatypes in SQL (mostly used)

int → will accept and store only numeric values

float → will accept and store only decimal values

char → will accept and store only alphabetics

## Sql commands

there are 5 types of Sql. commands

① DDL (Data definition language)

this is useful for structuring the data.

- (a) Create
- (b) Alter
- (c) Rename
- (d) Drop
- (e) Truncate -

② DML (data manipulation language)

this command is useful for write the command.

- (a) insert
- (b) update
- (c) Delete.

③ DQL (Data query language)

④ select

this is useful for read the data

④ DCL (Data control language)

this is useful for permission related

① Grant

② Revoke

⑤ TCL (transaction control language)

① commit

② Rollpoint

③ Savepoint

this is useful for saving the data

## Numerical values

- uint  $\rightarrow$  4 bytes
- TINYINT  $\rightarrow$  1 bytes
- Smallint  $\rightarrow$  2 bytes.
- mediumint  $\rightarrow$  3 bytes.
- Bigint  $\rightarrow$  8 bytes

for fraction data

- ① float
- ② double
- ③ Decimal

① float(m, d) (it can accommodate data)

m = total no. of digit

d = total no. of decimal digit

example

4567.67

m = 6

d = 2

②

Double ( same as float but it can accommodate 53 decimals)

③

Decimal ( it will not make any rounding up)

in order to hold character we will use

① char (255)

② wchar (255)

both is 255 then why we are using both so there is difference is when you are assigning Space for char like C30 It will allocate Only 30 but in wchar it will use only space that you gave ~~for Tom~~ it will allocate only 5 not 30

memory wise effective  $\rightarrow$  wchar

retrival speed  $\rightarrow$  char

and wchar can store alphanumeric numbers

# Date related datatypes

①	Datetime	yyyy-mm-dd HH:MM:ss
②	Time stamp	UTC (Universal Time coordinate)
③	time	HA:MIN:SS
④	year	YYYY