

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

use cts1

select \* from sys.tables

-- to rename a table

sp\_rename 'a','b'

select \* into newtable1 from student

-- copy only structure of the table

select \* into newtable2 from student

where 1=2

select \* from newtable2

-- delete table

drop table newtable2

-- delete databsse

drop database d1

select \* from student

-- will delete all records as there is no where clause, but we can use where clause

delete student

-- will delete all records , but table structure wil remain

truncate table student

-- with truncate table, we can not use where clause ,

-- it is used to delete all the records of a table in a single go

-- truncate table is ddl statement

-- delete is dml statement

CREATE LOGIN MyLogin WITH PASSWORD = '123';

create user Guru99 for login MyLogin

USE CTS1

GO

Grant select on student to Guru99

-- https://www.guru99.com/sql-server-create-user.html

-- Select

Select \* from employee

-- Functions , which perform specific task

-- inbuilt /user defined

-- inbuilt , which are alreay there

-- numeric functions , string functions , datetime functions

-- general functions

-- string functions which work on strings only

-- lower() , upper() , concatenate() , length()

-- numeric functions , max , min , sum , avg

alter table employee alter column name varchar(20)

update employee set name = rtrim(name)

select upper(name) from employee

select lower(name) , upper(name) from employee

select left(name, 3) from employee

select name, right(name, 3) from employee

select name, substring(name, 2,4) from employee

select name, ltrim(name) from employee

select name , len(ltrim(name)) from employee

select GetDate()

select DATEPART(month, GetDate())

select DATEPART(year, GetDate())

select Datename(month, GetDate())

Select DATEADD(month,2 , GetDate())

Functions could be

Scalar functions : which take single value and give you single result , lower, upper, abs, len

Multivalued functions /Group Functions /Aggregate Functions > Functions which takes lots of values and give you single result

Max, Min , count, sum, avg

-- Aggregate / Group Functions

select max(salary) from employee

select min(salary) from employee

select sum(salary) from employee

select avg(salary) from employee

select count(\*) from employee

create table t1 (id int, name varchar(20))

insert into t1 select id, name from employee

Foreign Key

-- Referential Integrity > Foreign Key

select \* from employee

drop table student

create table student

(rn int constraint pk primary key,

name varchar(20) not null,

address varchar(20) not null,

marks int constraint ck check(marks between 0 and 100))

insert into student values(

1,'Ajay','Delhi',90),

(2,'Vijay','Delhi',90),

(3,'Sagar','Delhi',90),

(4,'Deepak','Delhi',90),

(5,'Ajay','Delhi',90)

create table student\_fees(rn int

constraint fk foreign key references student(rn),

fees\_paid int, date\_paid date)

insert into student\_fees values(2, 9000, '12-09-2020')

insert into student\_fees values(1, 9000, '12-09-2020')

insert into student\_fees values(3, 9000, '10-21-2020')

select \* from student

select \* from student\_fees

Different formats while displaying date

https://www.mssqltips.com/sqlservertip/1145/date-and-time-conversions-using-sql-server/

select rn ,date\_paid,

convert(varchar , date\_paid, 13)

from student\_fees