Sql queries :

. for creating database

Create database <database name>

Ex:- create databse girid;

.for fetching database

Show databses;

.for deletion of databse:

Drop databse <databse name>;

Ex:- drop databse girid;

.to use database:

Use <database name>;

.to check current databse:

Select database();

.data type in sql

Three type:- numeric , string , date&time

Coloumns are specified into fields

Rows are specified into columns

.for numeric

.we use int

* From range 0 to 11 digit
* Ex : -1 0 1 5595 -9999

.varchar

Variable length between 1 and 255 character in length.

Ex: ‘T’ ‘thapa’ ‘5565’ ‘-7869’

‘susbcribe for daily awesome video’

.date

A date in yyyy-mm-dd format, between 1000-01-01 and 9999-12-31

.creating tables

CREATE TABLE tablename

(

Column\_name data\_type,

Column\_name data\_type

);

Ex:- create table students

(

Name varchar(55),

Age int

);

.to show table which is created above

show tables;

. to describe element in the table

desc students;

. to delete table

drop table students;

. to show the current available table after deletion

show tables;

. to insert into TABLES – this can be done only after creating the table

INSERT INTO table\_name(column1, column2, column3,…)

VALUES(value1, value2, value3,…);

insert into studentinfo

(id, name,class) – jis tarah hamne classify kiya hai yaha wese hi value m karenge like pahle id ka value

values(1, 'giri',6);

insert into studentinfo

values(2, 'rahul', 9);

.to show tables

select \* from studentinfo;

.if there is some warning and we have to see the warning

Show warning;

.NULL VS NOT NULL

NULL – “The value is not known” that doesn’t mean that value is zero

NOT NULL

CREATE TABLE <tablename>

(

Column1 varchar(100) NOT NULL,

Column2 int NOT NULL

);

Ex:-

create table stunull

(

id int not null,

name varchar(55) not null

);

.to know what is in the table

desc stunull;

. To insert into the table which is not null and when we empty one field

insert into stunull (name) values ('giri');

.when we show table then id will be zero by default

.DEFAULT VALUE

Create table <tablename>

(

Column1 varchar(100) DEFAULT VALUE,

Column2 int DEFAULT VALUE

);

.for assigning the default value

create table studef

(

id int not null default 0,

name varchar(55) not null default 'missing'

);

. Now we see studef table in detail

desc studef;

.when we put empty value in table

insert into studef() values();

.see the table

select \* from studef;

.if we have to add new column in the table then we use -ALTER

Alter table students ADD school varchar(55);

Ex:- alter table studef add class int;

.to see the table in detail

desc studef;

.to delete one column

ALTER TABLE table\_name

DROP COLUMN column\_name;

.PRIMARY KEY

-it constraints uniquely identifies each record in a table .

Primary keys must contain UNIQUE values, and cannot contain NULL values.

CREATE TABLE stud\_unique

(

Stud\_id INT NOT NULL,

Name varchar(55),

Age INT

, primary key (stud\_id)

);

.insert element into stud\_unique

insert into stud\_unique(stud\_id, NAME,AGE)

value(1,'girijha',25);

.show table

select \* from stud\_unique;

.another element in the table

insert into stud\_unique(stud\_id, NAME,AGE)

value(2,'giridhari jha',55);

.show table

select \* from stud\_unique;

.what is AUTO\_INCREMENT IN TABLE

It allow a unique number to be generated automatically when a new record is inserted inot a table

Actually isme auto unique id increment ho jayega

CREATE TABLE stud\_auto

(

Stud\_id int not null AUTO\_INCREMENT,

Name varchar(100),

Age int,

Primary key (stud\_id);

);

.to insert into stud\_auto and then we will see the unique id will automatically generated

insert into stud\_auto (NAME, AGE) values ('jaiho', 34);

insert into stud\_auto (NAME, AGE) values ('nabe', 340);

//to show it into table

select \* from stud\_auto;

.crud operation

1.Now we create the file –

Create table stucrud(

Id int not null auto\_increment,

Fname varchar(55),

Lname varchar(55),

Age int,

Primary key(id)

);

. we insert data in it

Insert into stucrud(fname,lname,age) values (‘giri’,’jha’,25), (‘chunnu’,’jha’,35), (‘yash’,’jha’,205), (‘radhe’,’jha’,21), (‘marut’,’jha’,24), (‘anjani’,’jha’,23), (‘raju’,’jha’,25), (‘mukund’,’jha’,15), (‘aditi’,’jha’,27), (‘sweety’,’jha’,25);

2.for read

Select \* from <tablename>

Another method

Select \* from stucrud where age=24;

To filter

Select fname,lname from stucrud where age=24;

3. update

Used to modify the existing records in a table.

UPDATE stucrud SET age=23

WHERE fname = ‘giri’;

UPDATE stucrud SET age=25

WHERE id = 7;

.Delete

Delete from <tablename> where column =’’;

Ex: delete from stucrud where fname=’marut’;

.MYAQL SELECT DISTINCT STATEMENT

It is used to return only different values and unique value.

Repeated value ko hata deta hai

Jab ek field ko show karenge tabhi distinct ka fayda hoga

Select DISTINCT column1,column2,…from table\_name

SELECT DISTINCT fname FROM stucrud;

.ORDER BY -it is used to sort the result-set in ascending or descending order

SELECT age FROM stucrud

ORDER BY age DESC;

.give unique id

select distinct age from stucrud

order by age desc;

.limit

It set the limit upto where we want to show the result

Select fname from stucrud order by fname limit 3;

.like operator

Agar hame thora bahuth kisi query k bare m pata ho like name = Anjani lkn hame yad nahi h pura nam tab hame jo thora bhuth yad hoga jese nj aata hai bich m Anjani word k

Select fname from stucrud where fname like ‘%nj%’;

.aggregate function

COUNT(), MAX(), MIN() AVG() and SUM() functions – aggregate function

Count() returns number of rows

Avg() returns avg value of a numeric column,

SUM() return the total sum of a numeric value

Select max(age ) from stucrud;

Select min(age ) from stucrud;

// for sum of all the value of age

Select sum(age ) from stucrud;

//count the id

Select count(id ) from stucrud;

//avg of age

select avg(age) from stucrud;

.LOGICAL OPERATOR

// we will filter on the basis of following logic

select \* from stucrud where age=25;

select \* from stucrud where age!=25;

select \* from stucrud where age <=25;

select \* from stucrud where age between 20 and 25;

select \* from stucrud where age not between 20 and 25;

.CONCAT() FUNCTION

// Add Two or more expression

Concat(expression1, expression2, expression3,…)

Select CONCAT (fname,’ ’,lname) from stucrud as fullName;

Ex: select concat( 'mukund' ,' ','jha');

//ye fullname k title se show karega

select concat( 'mukund' ,' ','jha')as fullname;

//agar sare name ko concat karna chahenge table m

Select concat(fname,’ ‘, lname) from stucrud as fullname;

.REVERSE() FUNCTIONS

It reverse a string and returns the result

Reverse(string)

Ex: select reverse(marut) as reverse;

//make palindrom with the help of concat and reverse

select concat('giri', reverse('giri')) as palindrom;

.CHAR\_LENGTH

The CHAR\_LENGTH() func return the length of string(in characters).

Select char\_length(“sql tutorial”) as LengthOfString;

//LCASE() & UCASE()

LOWER() func

Select lower(“SQL SERVER IS LOW”);

//UCASE()

UPPER()

The upper func converts a string to upper-case.

Select upper(“sql tutoeial is fun”);

Ex:

select char\_length('giri');

select upper('there is heaven of the earth') as upper;

select lower('THERE IS HEAVEN OF THE EARTH') as lower;

.DATE TIME DATA TYPES

//date format

DATE-format: yyyy-mm-dd

Time- format: hh:mi:ss

Datetime-format: yyyy-mm-dd hh:mi:ss

Ex:

//first we create a new table

create table datestu(

name varchar(55),

dob date,

dot time,

bt datetime

);

// then insert value on the basis of schema

insert into datestu value ('giri' , '1995-01-02','05:07:04','1994-04-19 05:04:03');

select \* from datestu;

.DATE TIME DATATYPES

Used for storing a date or a date/time value in the database:

CURDATE()- gives the current date :yyyy-mm-dd

NOW()- gives both cur date & time:

Yyyy-mm-dd hh:mi:ss

CURTIME() – gives the current time: hh:mi:ss

.FOREIGN KEY CONSTRAINTS

A foreignkey is used to link the key of the two table

Agr do table hai aur uska primary key same hai like cid dono table ka agr same hoga then dono table ko add karnge

Ex:

create table customer(

cid int not null auto\_increment primary key, cname varchar(55), email varchar(100));

// upar k table ko dekhnge

desc customer;

// ab upar wale cid ka use kar k foreignkey use karenge

create table orders(oid int not null auto\_increment primary key,orderdate date, cid int, foreign key(cid) references customer(cid));

// references customer(cid)- matlb ki hamne customer table se cid ko reference lenge

//upar k table ko dekhnge

desc orders;

//insert karenge dono customer me and foreign key m

insert into customer(cid,cname,email)values(1,'giri','giri123@gmail.com'),(2,'jha','jha123@gmail.com'),(3,'kumar','kumar123@gmail.com');

select \* from customer;

insert into orders(oid, orderdate,amount,cid) values(1,'2019/05/04',55,1),

(2,'2019/09/06',86,2),(3,'2022/09/07',155,1),(4,'2023/08/04',95,3);

//amount section reh gaya tha

alter table orders add amount int;

insert into orders(oid, orderdate,amount,cid) values(1,'2019/05/04',55,1),

(2,'2019/09/06',86,2),(3,'2022/09/07',155,1),(4,'2023/08/04',95,3);

select \* from orders;

.JOIN() -AGAR hame dono table kom join karna hoga

Like agar hame customer table m se pata karna hai ki giri ne kitna order kiya hai aur giri ka order detail orders table me hai

//1 (inner)join : return records that have matching values in both tables

Select \* from customer , orders where customer.cid = orders.cid;

//ye hame sara detail de dega dono table ko jod dega

Select \* from customer, join orders on customer.cid=orders.cid;

// ye hame sare data k bare m bata dega

select cname, orderdate, amount from customer join orders on customer.cid= orders.cid;

//2 LEFT(outer) join: returns all records from the left table, and the matched records from the right table

select\* from customer left join orders on customer.cid = orders.cid;

// upar wala code hame left aur right table k common chizo k sath sath left k sare data ko bata dega

//3 RIGHT(outer ) join: returns all records from the right table, and the matched records from the left table

select\* from customer right join orders on customer.cid = orders.cid;

//questions -ham banayenge do table aur hame dusre table se ashish ka address lena hai

// first table

create table Table7(

id int not null primary key, name varchar(55), rollno int null

);

//second table

create table Table9(

roll\_id int not null primary key , city varchar(55), address varchar(55)

);

desc Table5;

//insert element on the table on the basis of structure

insert into Table7(id,name,rollno)values(1,'giri',13),(2,'ashish',14),(3,'manshu',15);

select \* from Table7;

desc Table3;

//insert element on the table on the basis of structure in second table

insert into Table9(roll\_id,city,address)values(13,'x','w'),(14,'b','y'),(15,'n','z');

desc Table5;

//see inserted element in the table

select \* from Table5;

//bas ashish ka address nikalnge …. tn and tm jo hai wo do alag alag name diye hue hai nickname of table

select address from Table7 tn join Table9 tm on tn.rollno = tm.roll\_id where tn.name='ashish';

//all codes under sql yog

create database girid;

show databases;

drop database girid;

use girid;

select database();

create table students

(

name varchar(55),

age int

);

show tables;

desc students;

drop table students;

show tables;

create table studentinfo

(

id int,

name varchar(55),

class int

);

show tables;

desc studentinfo;

insert into studentinfo

(id, name,class)

values(1, 'giri',6);

insert into studentinfo

values(2, 'rahul', 9);

select \* from studentinfo;

create table stunull

(

id int not null,

name varchar(55) not null

);

desc stunull;

insert into stunull (name) values ('giri');

select \* from stunull;

create table studef

(

id int not null default 0,

name varchar(55) not null default 'missing'

);

desc studef;

insert into studef() values();

select \* from studef;

alter table studef add class int;

desc studef;

alter table studef drop column class;

desc studef;

CREATE TABLE stud\_unique

(

Stud\_id INT NOT NULL,

Name varchar(55),

Age INT

, primary key (stud\_id)

);

desc stud\_unique;

insert into stud\_unique(stud\_id, NAME,AGE)

value(1,'girijha',25);

select \* from stud\_unique;

insert into stud\_unique(stud\_id, NAME,AGE)

value(2,'giridhari jha',55);

select \* from stud\_unique;

CREATE TABLE stud\_auto

(

Stud\_id int not null AUTO\_INCREMENT,

Name varchar(100),

Age int,

Primary key (stud\_id)

);

select \* from stud\_auto;

desc stud\_auto;

insert into stud\_auto (NAME, AGE) values ('jaiho', 34);

insert into stud\_auto (NAME, AGE) values ('nabe', 340);

select \* from stud\_auto;

show tables;

Create table stucrud(

Id int not null auto\_increment,

fname varchar(55),

lname varchar(55),

age int,

Primary key(id)

);

desc stucrud;

Insert into stucrud(fname,lname,age) values ('giri','jha',25), ('chunnu','jha',35), ('yash','jha',205), ('radhe','jha',21), ('marut','jha',24), ('anjani','jha',23),

('raju','jha',25), ('mukund','jha',15),

('aditi','jha',27), ('sweety','jha',25);

select \* from stucrud;

Select \* from stucrud where age=24;

Select fname,lname from stucrud where age=24;

UPDATE stucrud SET age=23

WHERE fname = 'giri';

UPDATE stucrud SET age=25

WHERE id = 3;

select \* from stucrud;

delete from stucrud where fname='marut';

select \* from stucrud;

select distinct age from stucrud;

select distinct fname,age from stucrud;

select fname from stucrud

order by fname desc;

select distinct age from stucrud

order by age desc;

select fname from stucrud order by fname limit 3;

select fname, lname ,age from stucrud order by fname limit 3;

select fname from stucrud where fname like '%nj%';

select max(age) from stucrud;

select min(age) from stucrud;

select count(id) from stucrud;

select avg(age) from stucrud;

select \* from stucrud where age=25;

select \* from stucrud where age!=25;

select \* from stucrud where age <=25;

select \* from stucrud where age between 20 and 25;

select \* from stucrud where age not between 20 and 25;

select \* from stucrud where fname IN('giri','mukund');

select concat( 'mukund' ,' ','jha');

select concat( 'mukund' ,' ','jha')as fullname;

select concat(fname,' ',lname) from stucrud as fullname;

desc stucrud;

select \* from stucrud;

select reverse('giri') as reverse;

select concat('giri', reverse('giri')) as palindrom;

select char\_length('giri');

select upper('there is heaven of the earth') as upper;

select lower('THERE IS HEAVEN OF THE EARTH') as lower;

create table datestu(

name varchar(55),

dob date,

dot time,

bt datetime

);

insert into datestu value ('giri' , '1995-01-02','05:07:04','1994-04-19 05:04:03');

select \* from datestu;

insert into datestu values('giri', curdate(), curtime(),now());

select \* from datestu;

create table customer(

cid int not null auto\_increment primary key, cname varchar(55), email varchar(100));

desc customer;

create table orders(oid int not null auto\_increment primary key,orderdate date, cid int, foreign key(cid) references customer(cid));

desc orders;

insert into customer(cid,cname,email)values(1,'giri','giri123@gmail.com'),(2,'jha','jha123@gmail.com'),(3,'kumar','kumar123@gmail.com');

select \* from customer;

insert into orders(oid, orderdate,amount,cid) values(1,'2019/05/04',55,1),

(2,'2019/09/06',86,2),(3,'2022/09/07',155,1),(4,'2023/08/04',95,3);

alter table orders add amount int;

insert into orders(oid, orderdate,amount,cid) values(1,'2019/05/04',55,1),

(2,'2019/09/06',86,2),(3,'2022/09/07',155,1),(4,'2023/08/04',95,3);

select \* from orders;

insert into customer(cid,cname,email)values(5,'giridhari','giridharijha123@gmail.com');

select \* from customer;

select \* from orders;

Select \* from customer , orders where customer.cid = orders.cid ;

select cname, orderdate, amount from customer join orders on customer.cid= orders.cid;

select\* from customer left join orders on customer.cid = orders.cid;

select\* from customer right join orders on customer.cid = orders.cid;