SQL QUERIES

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| information\_schema |

| mysql |

| performance\_schema |

| test |

| vsv |

+--------------------+

mysql> use vsv;

Database changed

mysql> show tables;

+---------------+

| Tables\_in\_vsv |

+---------------+

| emp |

+---------------+

mysql> select \*from emp;

+------+-----+---------+--------+------+-------+-------+

| s\_no | eid | ename | gender | dept | sal | grade |

+------+-----+---------+--------+------+-------+-------+

| NULL | 1 | sarvesh | m | NULL | 40000 | B |

| NULL | 2 | hari | m | NULL | 30000 | B |

+------+-----+---------+--------+------+-------+-------+

mysql> select \* from emp where dept is null;

+------+-----+---------+--------+------+-------+-------+

| s\_no | eid | ename | gender | dept | sal | grade |

+------+-----+---------+--------+------+-------+-------+

| NULL | 1 | sarvesh | m | NULL | 40000 | B |

| NULL | 2 | hari | m | NULL | 30000 | B |

+------+-----+---------+--------+------+-------+-------+

mysql> select \* from emp where dept is not null;

mysql> drop table emp;

mysql> select \*from emp order by sal desc;

+-----+-----------+--------+-----------+-------+

| eid | ename | gender | dept | sal |

+-----+-----------+--------+-----------+-------+

| 4 | aarathana | f | technical | 59000 |

| 1 | sarvesh | m | technical | 40000 |

| 5 | arshad | m | hr | 40000 |

| 3 | abi | f | marketing | 29000 |

| 2 | saran | m | sales | 25000 |

+-----+-----------+--------+-----------+-------+

mysql> select \*from emp order by sal desc,ename asc;

+-----+-----------+--------+-----------+-------+

| eid | ename | gender | dept | sal |

+-----+-----------+--------+-----------+-------+

| 4 | aarathana | f | technical | 59000 |

| 5 | arshad | m | hr | 40000 |

| 1 | sarvesh | m | technical | 40000 |

| 3 | abi | f | marketing | 29000 |

| 2 | saran | m | sales | 25000 |

+-----+-----------+--------+-----------+-------+

mysql> alter table emp add doj date;

mysql> select \*from emp;

+-----+-----------+--------+-----------+-------+------+

| eid | ename | gender | dept | sal | doj |

+-----+-----------+--------+-----------+-------+------+

| 1 | sarvesh | m | technical | 40000 | NULL |

| 2 | saran | m | sales | 25000 | NULL |

| 3 | abi | f | marketing | 29000 | NULL |

| 4 | aarathana | f | technical | 59000 | NULL |

| 5 | arshad | m | hr | 40000 | NULL |

+-----+-----------+--------+-----------+-------+------+

mysql> update emp set doj='19.11.2018' where eid=5;

**STRING FUNCTIONS**

mysql> select char(65);

+----------+

| char(65) |

+----------+

| A |

+----------+

mysql> select char(97);

+----------+

| char(97) |

+----------+

| a |

+----------+

mysql> select concat(ename,sal) as 'Name salary' from emp;

+----------------+

| Name salary |

+----------------+

| sarvesh40000 |

| saran25000 |

| abi29000 |

| aarathana59000 |

| arshad40000 |

+----------------+

mysql> select concat("s.","parthiban");

+--------------------------+

| concat("s.","parthiban") |

+--------------------------+

| s.parthiban |

+--------------------------+

mysql> select lower("PARTHIBAN");

+--------------------+

| lower("PARTHIBAN") |

+--------------------+

| parthiban |

+--------------------+

mysql> select eid,lower(ename) from emp; # lcase(ename) #upper()/ucase()

+-----+--------------+

| eid | lower(ename) |

+-----+--------------+

| 1 | sarvesh |

| 2 | saran |

| 3 | abi |

| 4 | aarathana |

| 5 | arshad |

+-----+--------------+

mysql> select substr("ABCDEFGHIJ",3,4)"Subs"; #substring()

+------+

| Subs |

+------+

| CDEF |

+------+

mysql> select substr("ABCDEFGHIJ",3,4);

+--------------------------+

| substr("ABCDEFGHIJ",3,4) |

+--------------------------+

| CDEF |

+--------------------------+

mysql> select substr("ABCDEFGHIJ",2,5)'subs';

+-------+

| subs |

+-------+

| BCDEF |

+-------+

mysql> select substr("ABCDEFGHIJ",-7,3)'subs';

+------+

| subs |

+------+

| DEF |

+------+

mysql> select substr("ABCDEFGHIJ",2)'subs';

+-----------+

| subs |

+-----------+

| BCDEFGHIJ |

+-----------+

mysql> select ltrim(' mysql');

+----------------------+

| ltrim(' mysql') |

+----------------------+

| mysql |

+----------------------+

mysql> select rtrim('mysql ') as rt;

+-------+

| rt |

+-------+

| mysql |

+-------+

mysql> select rtrim('mysql ');

+----------------------------------+

| rtrim('mysql ') |

+----------------------------------+

| mysql |

+----------------------------------+

mysql> select trim(' mysql ') as tr;

+-------+

| tr |

+-------+

| mysql |

+-------+

mysql> select trim(' mysql ');

+---------------------------------------+

| trim(' mysql ') |

+---------------------------------------+

| mysql |

+---------------------------------------+

mysql> select instr('Oracle Corporation','cor')as instring;

+----------+

| instring |

+----------+

| 8 |

+----------+

mysql> select instr('Oracle Corporation','or')as instring;

+----------+

| instring |

+----------+

| 1 |

+----------+

mysql> select instr('Oracle Corporation','a')as instring;

+----------+

| instring |

+----------+

| 3 |

+----------+

mysql> select instr('Oracle Corporation','xyz')as instring;

+----------+

| instring |

+----------+

| 0 |

+----------+

mysql> select length("");

+------------+

| length("") |

+------------+

| 0 |

+------------+

mysql> select length("my sql");

+------------------+

| length("my sql") |

+------------------+

| 6 |

+------------------+

mysql> select length("my sql") as l;

+---+

| l |

+---+

| 6 |

+---+

mysql> select left('vidyodaya',2);

+---------------------+

| left('vidyodaya',2) |

+---------------------+

| vi |

+---------------------+

mysql> select left('vidyodaya',0);

+---------------------+

| left('vidyodaya',0) |

+---------------------+

| |

+---------------------+

mysql> select left('vidyodaya',50); #working method of right is same as left

+----------------------+

| left('vidyodaya',50) |

+----------------------+

| vidyodaya |

+----------------------+

mysql> select mid('vidyodaya',1,4);

+----------------------+

| mid('vidyodaya',1,4) |

+----------------------+

| vidy |

+----------------------+

mysql> select mid('vidyodaya',0,4);

+----------------------+

| mid('vidyodaya',0,4) |

+----------------------+

| |

+----------------------+

mysql> select substr('vidyodaya',1,6);

+-------------------------+

| substr('vidyodaya',1,6) |

+-------------------------+

| vidyod |

+-------------------------+

mysql> select mid('vidyodaya',1,6);

+----------------------+

| mid('vidyodaya',1,6) |

+----------------------+

| vidyod |

+----------------------+

**NUMERIC FUNCTIONS**

mysql> select mod(12,5);

+-----------+

| mod(12,5) |

+-----------+

| 2 |

+-----------+

mysql> select mod(12,0);

+-----------+

| mod(12,0) |

+-----------+

| NULL |

+-----------+

mysql> select mod(0,10);

+-----------+

| mod(0,10) |

+-----------+

| 0 |

+-----------+

mysql> select pow(12,2); #power() same

+-----------+

| pow(12,2) |

+-----------+

| 144 |

+-----------+

mysql> select round(1.1);

+------------+

| round(1.1) |

+------------+

| 1 |

+------------+

mysql> select round(1.5);

+------------+

| round(1.5) |

+------------+

| 2 |

+------------+

mysql> select round(1.4);

+------------+

| round(1.4) |

+------------+

| 1 |

+------------+

mysql> select round(1.193,1);

+----------------+

| round(1.193,1) |

+----------------+

| 1.2 |

+----------------+

mysql> select round(1.1946,2);

+-----------------+

| round(1.1946,2) |

+-----------------+

| 1.19 |

+-----------------+

mysql> select round(1.1956,2);

+-----------------+

| round(1.1956,2) |

+-----------------+

| 1.20 |

+-----------------+

mysql> select sign(1.5);

+-----------+

| sign(1.5) |

+-----------+

| 1 |

+-----------+

mysql> select sign(-1.5);

+------------+

| sign(-1.5) |

+------------+

| -1 |

+------------+

mysql> select sqrt(-1005);

+-------------+

| sqrt(-1005) |

+-------------+

| NULL |

+-------------+

mysql> select sqrt(1005);

+--------------------+

| sqrt(1005) |

+--------------------+

| 31.701734968294716 |

+--------------------+

mysql> select truncate(1005,2);

+------------------+

| truncate(1005,2) |

+------------------+

| 1005 |

mysql> select truncate(1005.564545,2);

+-------------------------+

| truncate(1005.564545,2) |

+-------------------------+

| 1005.56 |

+-------------------------+

**DATE FUNCTIONS**

mysql> select curdate(); #current\_date(), current\_date same

+------------+

| curdate() |

+------------+

| 2018-11-23 |

+------------+

mysql> select date('2020-02-0301:02:03'); #without space b/t date and time

+----------------------------+

| date('2020-02-0301:02:03') |

+----------------------------+

| NULL |

+----------------------------+

mysql> select date('2020-02-03 01:02:03');

+-----------------------------+

| date('2020-02-03 01:02:03') |

+-----------------------------+

| 2020-02-03 |

+-----------------------------+

1 row in set (0.00 sec)

mysql> select date('2020:02:03 01:02:03');

+-----------------------------+

| date('2020:02:03 01:02:03') |

+-----------------------------+

| 2020-02-03 |

+-----------------------------+

mysql> select month('2020:02-03 01:02-03');

+------------------------------+

| month('2020:02-03 01:02-03') |

+------------------------------+

| 2 |

+------------------------------+

mysql> select month('2020:02-03');

+---------------------+

| month('2020:02-03') |

+---------------------+

| 2 |

+---------------------+

mysql> select dayname('2018-11-23');

+-----------------------+

| dayname('2018-11-23') |

+-----------------------+

| Friday |

+-----------------------+

mysql> select dayofmonth('2018-12-3');

+-------------------------+

| dayofmonth('2018-12-3') |

+-------------------------+

| 3 |

+-------------------------+

mysql> select dayofmonth('2018-12-32');

+--------------------------+

| dayofmonth('2018-12-32') |

+--------------------------+

| NULL |

+--------------------------+

mysql> select dayofmonth('2018-12-31');

+--------------------------+

| dayofmonth('2018-12-31') |

+--------------------------+

| 31 |

+--------------------------+

mysql> select dayofweek('2018-11-18');

+-------------------------+

| dayofweek('2018-11-18') |

+-------------------------+

| 1 |

+-------------------------+

mysql> select dayname('2018-11-18');

+-----------------------+

| dayname('2018-11-18') |

+-----------------------+

| Sunday |

+-----------------------+

mysql> select dayofyear('2018-11-18');

+-------------------------+

| dayofyear('2018-11-18') |

+-------------------------+

| 322 |

+-------------------------+

mysql> select now();

+---------------------+

| now() |

+---------------------+

| 2018-11-23 15:27:12 |

+---------------------+

mysql> select now(),sleep(10),now();

+---------------------+-----------+---------------------+

| now() | sleep(10) | now() |

+---------------------+-----------+---------------------+

| 2018-11-23 15:28:49 | 0 | 2018-11-23 15:28:49 |

+---------------------+-----------+---------------------+

**DEFAULT CONSTRAINT**

mysql> create table emp2(ecode integer unique,ename char(20),sex char(1),salary int default '20000');

mysql> insert into emp2(ecode,ename,sex)values (1,'anamika','F');

mysql> desc emp2;

+--------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------+----------+------+-----+---------+-------+

| ecode | int(11) | YES | UNI | NULL | |

| ename | char(20) | YES | | NULL | |

| sex | char(1) | YES | | NULL | |

| salary | int(11) | YES | | 20000 | |

+--------+----------+------+-----+---------+-------+

mysql> select \*from emp2;

+-------+---------+------+--------+

| ecode | ename | sex | salary |

+-------+---------+------+--------+

| 1 | anamika | F | 20000 |

+-------+---------+------+--------+

**UNIQUE CONSTRAINT**

mysql> insert into emp2 values(null,'gurusaran','M',35000);

Query OK, 1 row affected (0.06 sec)

mysql> insert into emp2 values(null,'saisaran','F',35000);

mysql> select \*from emp2;

+-------+-----------+------+--------+

| ecode | ename | sex | salary |

+-------+-----------+------+--------+

| 1 | anamika | F | 20000 |

| 2 | saran | F | 35000 |

| NULL | gurusaran | M | 35000 |

| NULL | saisaran | F | 35000 |

+-------+-----------+------+--------+

**FOREIGN KEY CONSTRAINT**

mysql> create database amazon;

mysql> use amazon;

Database changed

mysql> create table cus(cusid int unique,cusname varchar(15),cusaddr varchar(15),age int);

mysql> insert into cus values(1,'aditya','poy',17);

mysql> insert into cus values(2,'arun','cbe',16);

mysql> insert into cus values(3,'balaji','salem',18);

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 1 | aditya | poy | 17 |

| 2 | arun | cbe | 16 |

| 3 | balaji | salem | 18 |

+-------+---------+---------+------+

mysql> create table orders(oid int primary key,oname char(15),cusid int,foreign key(cusid) references cus(cusid));

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 1 | aditya | poy | 17 |

| 2 | arun | cbe | 16 |

| 3 | balaji | salem | 18 |

+-------+---------+---------+------+

3 rows in set (0.07 sec)

mysql> show tables;

+------------------+

| Tables\_in\_amazon |

+------------------+

| cus |

| orders |

+------------------+

mysql> select \*from orders;

Empty set (0.06 sec)

mysql> desc orders

-> ;

+-------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+----------+------+-----+---------+-------+

| oid | int(11) | NO | PRI | NULL | |

| oname | char(15) | YES | | NULL | |

| cusid | int(11) | YES | MUL | NULL | |

+-------+----------+------+-----+---------+-------+

mysql> insert into orders values(1,'TV',4);

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`amazon`.`orders`, CONSTRAINT `orders\_ibfk\_1` FOREIGN KE

Y (`cusid`) REFERENCES `cus` (`cusid`))

mysql> insert into orders values(1,'TV',3);

mysql> select \*from orders;

+-----+--------+-------+

| oid | oname | cusid |

+-----+--------+-------+

| 1 | TV | 3 |

| 2 | Mobile | 3 |

+-----+--------+-------+

mysql> delete from cus where cusid=3;

ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`amazon`.`orders`, CONSTRAINT `orders\_ibfk\_1` FOREIG

N KEY (`cusid`) REFERENCES `cus` (`cusid`))

mysql> delete from orders where cusid=3;

Query OK, 2 rows affected (0.05 sec)

mysql> select \*from orders;

Empty set (0.00 sec)

mysql> delete from cus where cusid=3;

Query OK, 1 row affected (0.03 sec)

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 1 | aditya | poy | 17 |

| 2 | arun | cbe | 16 |

+-------+---------+---------+------+

**ON DELETE CASCADE**

mysql> create table orders(oid int primary key,oname char(15),cusid int,foreign key(cusid) references cus(cusid) on delete cascade);

Query OK, 0 rows affected (0.15 sec)

mysql> insert into orders values(1,'TV',3); //BCOZ orders table doesn’t have cusid 3

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`amazon`.`orders`, CONSTRAINT `orders\_ibfk\_1`

FOREIGN KEY (`cusid`) REFERENCES `cus` (`cusid`) ON DELETE CASCADE)

mysql> insert into orders values(1,'TV',2);

Query OK, 1 row affected (0.05 sec)

mysql> delete from cus where cusid=2;

Query OK, 1 row affected (0.05 sec)

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 1 | aditya | poy | 17 |

+-------+---------+---------+------+

1 row in set (0.00 sec)

mysql> select \*from orders;

Empty set (0.00 sec)

**ON UPDATE CASCADE**

mysql> create table orders(oid int primary key,oname char(15),cusid int,foreign key(cusid) references cus(cusid) on update cascade);

mysql> insert into cus values(1,'aditya','poy',17);

mysql> insert into cus values(2,'arun','cbe',16);

mysql> insert into cus values(3,'balaji','salem',18);

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 1 | aditya | poy | 17 |

| 2 | arun | cbe | 16 |

| 3 | balaji | salem | 18 |

+-------+---------+---------+------+

mysql> insert into orders values(1,'TV',2);

Query OK, 1 row affected (0.06 sec)

mysql> select \*from orders;

+-----+-------+-------+

| oid | oname | cusid |

+-----+-------+-------+

| 1 | TV | 2 |

+-----+-------+-------+

mysql> delete from cus where cusid=1;

Query OK, 1 row affected (0.06 sec)

mysql> select \*from orders;

+-----+-------+-------+

| oid | oname | cusid |

+-----+-------+-------+

| 1 | TV | 2 |

+-----+-------+-------+

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 2 | arun | cbe | 16 |

| 3 | balaji | salem | 18 |

+-------+---------+---------+------+

mysql> insert into orders values(2,'TV',3);

Query OK, 1 row affected (0.07 sec)

mysql> select \*from orders;

+-----+-------+-------+

| oid | oname | cusid |

+-----+-------+-------+

| 1 | TV | 2 |

| 2 | TV | 3 |

+-----+-------+-------+

mysql> update orders set cusid=1 where oid=1; #When we try to make changes in child table error will raise.

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`amazon`.`orders`, CONSTRAINT `orders\_ibfk\_1`

FOREIGN KEY (`cusid`) REFERENCES `cus` (`cusid`) ON UPDATE CASCADE)

mysql> update cus set cusid=5 where cusid=3; #Through parent table we can change child table data.

Query OK, 1 row affected (0.15 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from orders;

+-----+-------+-------+

| oid | oname | cusid |

+-----+-------+-------+

| 1 | TV | 2 |

| 2 | TV | 5 |

+-----+-------+-------+

mysql> select \* from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 2 | arun | cbe | 16 |

| 5 | balaji | salem | 18 |

+-------+---------+---------+------+

**TABLE CONSTRAINT**

mysql> create table items(s\_no int,icode int,idetail char(10),iprice int,imanu char(10),primary key(s\_no,icode));

Query OK, 0 rows affected (0.11 sec)

mysql> create table items(s\_no int,icode int,idetail char(10),iprice int,imanu char(10),primary key(icode,s\_no),check(price>200));

Query OK, 0 rows affected (0.12 sec)

**VIEWING TABLE STRUCTURE**

mysql> show create table cus;

+-------+--------------------------------------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------------------------+

| Table | Create Table

|

+-------+--------------------------------------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------------------------+

| cus | CREATE TABLE `cus` (

`cusid` int(11) DEFAULT NULL,

`cusname` varchar(15) DEFAULT NULL,

`cusaddr` varchar(15) DEFAULT NULL,

`age` int(11) DEFAULT NULL,

UNIQUE KEY `cusid` (`cusid`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 |

+-------+--------------------------------------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------------------------+

mysql> DESC cus;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| cusid | int(11) | YES | UNI | NULL | |

| cusname | varchar(15) | YES | | NULL | |

| cusaddr | varchar(15) | YES | | NULL | |

| age | int(11) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

4 rows in set (0.04 sec)

mysql> describe cus; #mysql> show columns from cus;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| cusid | int(11) | YES | UNI | NULL | |

| cusname | varchar(15) | YES | | NULL | |

| cusaddr | varchar(15) | YES | | NULL | |

| age | int(11) | YES | | NULL | |

+---------+-------------+------+-----+---------+-------+

**CREATING TABLE FROM EXISTING TABLE**

mysql> create table cnameage as(select cusname,age from cus);

Query OK, 2 rows affected (0.19 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> select \*from cnameage;

+---------+------+

| cusname | age |

+---------+------+

| arun | 16 |

| balaji | 18 |

+---------+------+

mysql> select \*from cus;

+-------+---------+---------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+---------+------+

| 2 | arun | cbe | 16 |

| 5 | balaji | salem | 18 |

| 1 | akash | poy | 22 |

| 3 | ashavad | trichy | 22 |

| 4 | chandru | trichy | 15 |

+-------+---------+---------+------+

5 rows in set (0.00 sec)

mysql> create table highage as(select cusname,age from cus where age>15);

Query OK, 4 rows affected (0.17 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \*from highage;

+---------+------+

| cusname | age |

+---------+------+

| arun | 16 |

| balaji | 18 |

| akash | 22 |

| ashavad | 22 |

+---------+------+

mysql> select sysdate(),sleep(10),sysdate();

+---------------------+-----------+---------------------+

| sysdate() | sleep(10) | sysdate() |

+---------------------+-----------+---------------------+

| 2018-12-08 13:27:15 | 0 | 2018-12-08 13:27:25 |

+---------------------+-----------+---------------------+

**DATA MANIPULATING COMMANDS**

**INSERT**

mysql> insert into cus(cusid,cusname,cusaddr) values (6,'vicky','palladam'); #Age is missing so NULL, If that column is NOT NULL field, we can’t omit that field data.

#If you omit a field that should have either default value or they allow NULL values.

Query OK, 1 row affected (0.05 sec)

mysql> select \*from cus;

+-------+---------+----------+------+

| cusid | cusname | cusaddr | age |

+-------+---------+----------+------+

| 2 | arun | cbe | 16 |

| 5 | balaji | salem | 18 |

| 1 | akash | poy | 22 |

| 3 | ashavad | trichy | 22 |

| 4 | chandru | trichy | 15 |

| 6 | vicky | palladam | NULL |

+-------+---------+----------+------+

**Inserting NULL values**

mysql> insert into cus values(7,'mani',NULL,45); #NULL without quotes

**Inserting Date**

mysql> alter table cus add jdate date;

Query OK, 7 rows affected (0.28 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \*from cus;

+-------+---------+----------+------+-------+

| cusid | cusname | cusaddr | age | jdate |

+-------+---------+----------+------+-------+

| 2 | arun | cbe | 16 | NULL |

| 5 | balaji | salem | 18 | NULL |

| 1 | akash | poy | 22 | NULL |

| 3 | ashavad | trichy | 22 | NULL |

| 4 | chandru | trichy | 15 | NULL |

| 6 | vicky | palladam | NULL | NULL |

| 7 | mani | NULL | 45 | NULL |

+-------+---------+----------+------+-------+

mysql> update cus set jdate='2018-12-08' where cusid=7;

Query OK, 1 row affected (0.11 sec)

**INSERTING DATA FROM ANOTHER TABLE**

mysql> create table highage(cusid int primary key,cname char(20),caddr char(20),age int,jd date);

Query OK, 0 rows affected (0.16 sec)

mysql> insert into highage select \*from cus where age>15;

Query OK, 5 rows affected (0.07 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select \*from highage;

+-------+---------+--------+------+------------+

| cusid | cname | caddr | age | jd |

+-------+---------+--------+------+------------+

| 1 | akash | poy | 22 | NULL |

| 2 | arun | cbe | 16 | NULL |

| 3 | ashavad | trichy | 22 | NULL |

| 5 | balaji | salem | 18 | NULL |

| 7 | mani | NULL | 45 | 2018-12-08 |

+-------+---------+--------+------+------------+

**UPDATE**

mysql> update highage set jd='2018-1-31' where jd is NULL;

Query OK, 4 rows affected (0.05 sec)

Rows matched: 4 Changed: 4 Warnings: 0

mysql> select \*from highage;

+-------+---------+--------+------+------------+

| cusid | cname | caddr | age | jd |

+-------+---------+--------+------+------------+

| 1 | akash | poy | 22 | 2018-01-31 |

| 2 | arun | cbe | 16 | 2018-01-31 |

| 3 | ashavad | trichy | 22 | 2018-01-31 |

| 5 | balaji | salem | 18 | 2018-01-31 |

| 7 | mani | NULL | 45 | 2018-12-08 |

+-------+---------+--------+------+------------+

**UPDATING MULTIPLE COLUMNS**

mysql> update highage set age=26,caddr='pondi' where caddr='cbe';

Query OK, 1 row affected (0.05 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \*from highage;

+-------+---------+--------+------+------------+

| cusid | cname | caddr | age | jd |

+-------+---------+--------+------+------------+

| 1 | akash | poy | 22 | 2018-01-31 |

| 2 | arun | pondi | 26 | 2018-01-31 |

| 3 | ashavad | trichy | 22 | 2018-01-31 |

| 5 | balaji | salem | 18 | 2018-01-31 |

| 7 | mani | NULL | 45 | 2018-12-08 |

+-------+---------+--------+------+------------+

**USING EXPRESSIONS IN UPDATE**

mysql> update highage set age=age+2;

Query OK, 5 rows affected (0.08 sec)

Rows matched: 5 Changed: 5 Warnings: 0

mysql> select \*from highage;

+-------+---------+--------+------+------------+

| cusid | cname | caddr | age | jd |

+-------+---------+--------+------+------------+

| 1 | akash | poy | 24 | 2018-01-31 |

| 2 | arun | pondi | 28 | 2018-01-31 |

| 3 | ashavad | trichy | 24 | 2018-01-31 |

| 5 | balaji | salem | 20 | 2018-01-31 |

| 7 | mani | NULL | 47 | 2018-12-08 |

+-------+---------+--------+------+------------+

mysql> update highage set caddr='cbe' where cusid=7;

Query OK, 1 row affected (0.06 sec)

**DELETE**

mysql> delete from highage where cusid=7;

Query OK, 1 row affected (0.05 sec)

mysql> select \*from highage;

+-------+---------+--------+------+------------+

| cusid | cname | caddr | age | jd |

+-------+---------+--------+------+------------+

| 1 | akash | poy | 24 | 2018-01-31 |

| 2 | arun | pondi | 28 | 2018-01-31 |

| 3 | ashavad | trichy | 24 | 2018-01-31 |

| 5 | balaji | salem | 20 | 2018-01-31 |

+-------+---------+--------+------+------------+

4 rows in set (0.00 sec)

mysql> delete from highage;

Query OK, 4 rows affected (0.06 sec)

mysql> select \*from highage;

Empty set (0.00 sec)

**DATA DEFINITION COMMANDS**

**ALTER**

mysql> alter table cus add phno bigint;

Query OK, 7 rows affected (0.29 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \*from cus;

+-------+---------+----------+------+------------+------+

| cusid | cusname | cusaddr | age | jdate | phno |

+-------+---------+----------+------+------------+------+

| 2 | arun | cbe | 16 | NULL | NULL |

| 5 | balaji | salem | 18 | NULL | NULL |

| 1 | akash | poy | 22 | NULL | NULL |

| 3 | ashavad | trichy | 22 | NULL | NULL |

| 4 | chandru | trichy | 15 | NULL | NULL |

| 6 | vicky | palladam | NULL | NULL | NULL |

| 7 | mani | NULL | 45 | 2018-12-08 | NULL |

+-------+---------+----------+------+------------+------+

**CHANGING THE COLUMNS SIZE**

mysql> alter table cus modify cusname char(30);

Query OK, 7 rows affected (0.31 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> alter table cus modify cusname char(3);

ERROR 1265 (01000): Data truncated for column 'cusname' at row 1

**DELETE THE COLUMN**

mysql> alter table cus drop phno;

Query OK, 7 rows affected (0.37 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \*from cus;

+-------+---------+----------+------+------------+

| cusid | cusname | cusaddr | age | jdate |

+-------+---------+----------+------+------------+

| 2 | arun | cbe | 16 | NULL |

| 5 | balaji | salem | 18 | NULL |

| 1 | akash | poy | 22 | NULL |

| 3 | ashavad | trichy | 22 | NULL |

| 4 | chandru | trichy | 15 | NULL |

| 6 | vicky | palladam | NULL | NULL |

| 7 | mani | NULL | 45 | 2018-12-08 |

+-------+---------+----------+------+------------+

mysql> alter table cus modify age int after cusname;

Query OK, 7 rows affected (0.34 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \*from cus;

+-------+---------+------+----------+------------+

| cusid | cusname | age | cusaddr | jdate |

+-------+---------+------+----------+------------+

| 2 | arun | 16 | cbe | NULL |

| 5 | balaji | 18 | salem | NULL |

| 1 | akash | 22 | poy | NULL |

| 3 | ashavad | 22 | trichy | NULL |

| 4 | chandru | 15 | trichy | NULL |

| 6 | vicky | NULL | palladam | NULL |

| 7 | mani | 45 | NULL | 2018-12-08 |

+-------+---------+------+----------+------------+

7 rows in set (0.00 sec)

mysql> alter table cus change cusname customername char(30);

Query OK, 7 rows affected (0.29 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \*from cus;

+-------+--------------+------+----------+------------+

| cusid | customername | age | cusaddr | jdate |

+-------+--------------+------+----------+------------+

| 2 | arun | 16 | cbe | NULL |

| 5 | balaji | 18 | salem | NULL |

| 1 | akash | 22 | poy | NULL |

| 3 | ashavad | 22 | trichy | NULL |

| 4 | chandru | 15 | trichy | NULL |

| 6 | vicky | NULL | palladam | NULL |

| 7 | mani | 45 | NULL | 2018-12-08 |

+-------+--------------+------+----------+------------+

**RENAMING THE TABLE**

mysql> alter table cus rename to customer;

Query OK, 0 rows affected (0.06 sec)

mysql> select \*from cus;

ERROR 1146 (42S02): Table 'amazon.cus' doesn't exist

mysql> select \*from customer;

+-------+--------------+------+----------+------------+

| cusid | customername | age | cusaddr | jdate |

+-------+--------------+------+----------+------------+

| 2 | arun | 16 | cbe | NULL |

| 5 | balaji | 18 | salem | NULL |

| 1 | akash | 22 | poy | NULL |

| 3 | ashavad | 22 | trichy | NULL |

| 4 | chandru | 15 | trichy | NULL |

| 6 | vicky | NULL | palladam | NULL |

| 7 | mani | 45 | NULL | 2018-12-08 |

+-------+--------------+------+----------+------------+

7 rows in set (0.00 sec)

**REMOVING COLUMN COMPONENTS**

**DEFAULT CONSTRAIN REMOVING and ADDING**

mysql> alter table emp2 alter column bonus drop default;

mysql> alter table emp2 alter column bonus set default '1000';

Query OK, 0 rows affected (0.37 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \*from emp2;

+------+---------+--------+---------------+------+------------+-------+

| eid | ename | ph\_no | qualification | age | experience | bonus |

+------+---------+--------+---------------+------+------------+-------+

| 1 | sarvesh | 123456 | B.E | 25 | 2 | 2000 |

| 2 | siva | 13456 | B.Tech | 23 | 1 | 1500 |

| 3 | kamal | 104456 | M.Tech | 26 | 3 | 2500 |

| 4 | akhilya | 664456 | B.Tech | 27 | 4 | 3000 |

+------+---------+--------+---------------+------+------------+-------+

4 rows in set (0.00 sec)

mysql> insert into emp2(eid,ename,ph\_no,qualification,age,experience) values(5,'swetha',556633,'MCA',25,4);

Query OK, 1 row affected (0.38 sec)

mysql> select \*from emp2;

+------+---------+--------+---------------+------+------------+-------+

| eid | ename | ph\_no | qualification | age | experience | bonus |

+------+---------+--------+---------------+------+------------+-------+

| 1 | sarvesh | 123456 | B.E | 25 | 2 | 2000 |

| 2 | siva | 13456 | B.Tech | 23 | 1 | 1500 |

| 3 | kamal | 104456 | M.Tech | 26 | 3 | 2500 |

| 4 | akhilya | 664456 | B.Tech | 27 | 4 | 3000 |

| 5 | swetha | 556633 | MCA | 25 | 4 | 1000 |

+------+---------+--------+---------------+------+------------+-------+

5 rows in set (0.00 sec)

mysql> select \*from emp2;

+------+---------+--------+----------------------+------+------------+-------+

| eid | ename | ph\_no | qualification | age | experience | bonus |

+------+---------+--------+----------------------+------+------------+-------+

| 1 | sarvesh | 123456 | B.E | 25 | 2 | 2000 |

| 2 | siva | 13456 | B.Tech | 23 | 1 | 1500 |

| 3 | kamal | 104456 | M.Tech | 26 | 3 | 2500 |

| 4 | akhilya | 664456 | B.Tech | 27 | 4 | 3000 |

| 5 | swetha | 556633 | MCA | 25 | 4 | 1000 |

| 6 | karthi | 443311 | B.Arch | 12 | 4 | 1000 |

| 7 | parthi | 979199 | M.Sc,M.Phil,MBA,B.Ed | 28 | 4 | 1000 |

| 8 | dany | 96885 | M.Sc | 21 | 0 | 1000 |

+------+---------+--------+----------------------+------+------------+-------+

8 rows in set (0.00 sec)

**REMOVING PRIMARY KEY**

mysql> select \*from highage;

mysql> desc highage;

+-------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+----------+------+-----+---------+-------+

| cusid | int(11) | NO | PRI | NULL | |

| cname | char(20) | YES | | NULL | |

| caddr | char(20) | YES | | NULL | |

| age | int(11) | YES | | NULL | |

| jd | date | YES | | NULL | |

+-------+----------+------+-----+---------+-------+

mysql> alter table highage drop primary key;

Query OK, 0 rows affected (0.45 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc highage;

+-------+----------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+----------+------+-----+---------+-------+

| cusid | int(11) | NO | | NULL | |

| cname | char(20) | YES | | NULL | |

| caddr | char(20) | YES | | NULL | |

| age | int(11) | YES | | NULL | |

| jd | date | YES | | NULL | |

+-------+----------+------+-----+---------+-------+

**ADDIING PRIMARY KEY**

mysql> alter table highage add primary key (cusid);

Query OK, 0 rows affected (0.22 sec)