```
*Basic*

1) create

create table customer(
customerid int not null primary KEY AUTO_INCREMENT,
firstname varchar (255) not null,
age Int,
date date

);
-------------------------------------------------------------
2)decrypt password

SELECT toolkit.decrypt(password),t.* FROM userlist t
-------------------------------------------------------------
2)backup

select into customerbackup in backup.mdb from customer
--------------------------------------------------------------
3) paswword set

UPDATE userlist SET cl_password = 'f14ab41a',cl_locked = 'N' WHERE
loginid = 'Pranesh'
-----------------------------------------------------------
2) INSERT

insert into customers (column names)
values (1,2)

INSERT INTO info_table (name, message)
VALUES('Peter', 'Hi'),
('Joseph', 'Hello'),
('Mark', 'Welcome');

INSERT INTO table_name2 (column_list)
SELECT column_list
FROM table_name1
WHERE condition;

-----------------------------------------------------------------
3)multiple insert

insert into customers (column names)
values (1,2), (3,24);
--------------------------------------------------------------------
3) UPDATE

update customer
set firstname = akshay
where customerid =1


UPDATE user SET authentication_string = PASSWORD('jtp12345') WHERE user =
'peter' AND host = 'localhost'
--------------------------------------------------------------------
4)updte multiple

update customer
set firstname = as,
     lastname =names
where id IN (1,2)
------------------------------------------------------------------

5)for sql - TOP - first highest record , top3 - first three record.
select TOP1 SALARY FROM EMPLOYEE

------------------------------------------------------------------
5) distinct - return wthout duplicates data
  select distinct city from customers;
------------------------------------------------------------------
6)multiple condition

select from customer
where price in (10,20) AND NOT PRICE = 30
-------------------------------------------------------------------
7)drop,truncate table:

 DROP TABLE TABLENMAE
 TRUNCATE TABLE TABELNAME
 ------------------------------------------------------------------
8) DELETE FROM CUSTOMER WHERE EMP ID = 1
--------------------------------------------------------------------

10) Alter

ALTER TABLE TALENAME
rename to new TABLENAME

ALTER TABLE TALENAME
DROP TABENAME

ALTER TABLE TALENAMe
MODIFY TALBENAME DATATYPE

*add column
ALTER TABLE TALENAMe
ADD address varchar(100)
AFTER surname;


alter table tablename
modify city varchar (255)

*delete column
ALTER TABLE table_name
DROP COLUMN column_name;

*rename column
ALTER TABLE customer
RENAME COLUMN cust_id TO id,

ALTER  TABLE person_tbl
ADD PRIMARY KEY (last_name, first_name);

--------------------------------------------------------------------
11) LIKE

SELECT FROM CUSTOMER
WHERE FIRSTNAME LIKE 'A%'
```

```
--------------------------------------------------------------------
12)AND

 select from customer
  where city = 'mumbai' AND CITY = ' PUNE'
--------------------------------------------------------------------

13) select from customer
  where city = 'mumbai' OR CITY = ' PUNE'
--------------------------------------------------------------------
14)UNION

select city from customer
UNION
select city from supplier
---------------------------------------------------------------------
15) not

select from customer
where not country = 'germany'
---------------------------------------------------------------------
16) limit

select from customer
limit 3;
---------------------------------------------------------------------
17)CREATE VIEW view_name AS
SELECT column1, column2, ...
FROM table_name
WHERE colnmae= value;
---------------------------------------------------------------------

18)CREATE INDEX INDEXNAME ON
TABLENAME COLUNMNAME

19)create view viewname
as query



----------------------------------------------------------------------


20)copy table

**creates table without data.

CREATE TABLE duplicate_table LIKE original_table;

INSERT duplicate_table SELECT * FROM original_table;

**creates table with data.

create table table2 as select*from table1

-----------------------------------------------------------------------

21)select date_format(joiningDate, '%d/%m/%Y') from Customers;

------------------------------------------------------------------------
```

```
30)MySQL Inner Join with USING clause
Sometimes, the name of the columns is the same in both the tables.
 In that case, we can use a USING keyword to access the records.

SELECT student_id, inst_name, city, technology
FROM students
INNER JOIN technologies
USING (student_id);
----------------------------------------------------------------------

32)multiple like
select first_name from Customers where (first_name like 'a%' or
first_name like 'p%');
--------------------------------------------------------------------

33)add csv/excel data in table
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server
8.0/Uploads/address_book.csv'
INTO TABLE tablename
FIELDS TERMINATED BY ','
OPTIONALLY ENCLOSED BY '"'
LINES TERMINATED BY '\r\n'
IGNORE 1 ROWS;
---------------------------------------------------------------------
34)blank recored delete
delete from test where StudentName  IS NULL;



----------------------------------------------------------------------
35) null data

SELECT * FROM Customers
WHERE age is null;

-----------------------------------------------------------------------
36)

select first_name ,count(first_name),age,count(age) from Customers
group by first_name,age
having count(first_name)>1


-----------------------------------------------------------------------
empty date
SELECT * INTO Table_Copy
FROM Table
where 1=2
------------------------------------------------------------------------
37) fetch duplicate records
SELECT FullName, ManagerId, DateOfJoining, City, COUNT(*)
FROM EmployeeDetails
GROUP BY FullName, ManagerId, DateOfJoining, City
HAVING COUNT(*) > 1;
------------------------------------------------------------------------
38) remove duplicates from a table
DELETE E1 FROM Customers E1
INNER JOIN Customers E2
WHERE E1.Customer_id > E2.Customer_id
```

```
AND E1.first_name = E2.first_name
AND E1.age= E2.age
AND E1.City = E2.City;

                 or
SELECT first_name, last_name, age, City, COUNT(*)
FROM EmployeeDetails
GROUP BY first_name, last_name, age, City
HAVING COUNT(*) > 1;

delete  from  Customers
where
first_name='akshay ' and last_name='sawant ' and age='29' and
ifnull(city,'') ='' and  date='2024-08-22'
order by customer_id desc limit 1



----------------------------------------------------------------

delete particular value
UPDATE Customers
SET age = NULL
WHERE customer_id = '1'
-------------------------------------------------------------
add email validation to your database

SELECT Email FROM EmployeeInfo WHERE NOT REGEXP_LIKE(Email, ‘[A-Z0-9._%+-
]+@[A-Z0-9.-]+.[A-Z]{2,4}’, ‘i’);
------------------------------------------------------------------------

conditions:

1)to display the first and the last record
SELECT * FROM EmployeeInfo WHERE EmpID = (SELECT MIN(EmpID) FROM
EmployeeInfo);
SELECT * FROM EmployeeInfo WHERE EmpID = (SELECT MAX(EmpID) FROM
EmployeeInfo);

-------------------------------------------------------------------------
2)find the third-highest salary

SELECT TOP 1 salary
FROM(
SELECT TOP 3 salary
FROM employee_table
ORDER BY salary DESC) AS emp
ORDER BY salary ASC;
-------------------------------------------------------------------------
-
3)SELECT max  salary
FROM(
SELECT max  salary
FROM employee_table
ORDER BY salary DESC) AS emp
ORDER BY salary ASC;
-------------------------------------------------------------------------
--
```

```
--------------------------------------------------------------------------
--
5)SELECT CONCAT(EmpFname, ' ', EmpLname) AS 'FullName' FROM EmployeeInfo;

--------------------------------------------------------------------------
--
6)SELECT * FROM EmployeeInfo WHERE EmpFname NOT IN ('Sanjay','Sonia')
--------------------------------------------------------------------------
---
7)SELECT Email FROM EmployeeInfo WHERE NOT REGEXP_LIKE(Email, ‘[A-Z0-
9._%+-]+@[A-Z0-9.-]+.[A-Z]{2,4}’, ‘i’);
--------------------------------------------------------------------------
---
8) Departments who have less than 2 employees working in it.

SELECT DEPARTMENT, COUNT(EmpID) as 'EmpNo' FROM EmployeeInfo GROUP BY
DEPARTMENT HAVING COUNT(EmpD) < 2;
--------------------------------------------------------------------------
---

11)find the maximum, minimum, and average salary of the employees.

SELECT Max(Salary),
Min(Salary),
AVG(Salary)
FROM EmployeeSalary;
--------------------------------------------------------------------------
----
10)employees who work on Projects other than P1.

SELECT EmpId
FROM EmployeeSalary
WHERE NOT Project='P1';
--------------------------------------------------------------------------
-----
11)fetch all the EmpIds which are present in either of the tables –
‘EmployeeDetails’ and ‘EmployeeSalary’.

SELECT EmpId FROM EmployeeDetails
UNION
SELECT EmpId FROM EmployeeSalary;
--------------------------------------------------------------------------
-----
 12)Write an SQL query to fetch common records between two tables.
Ans. SQL Server – Using INTERSECT operator-

SELECT * FROM EmployeeSalary
INTERSECT
SELECT * FROM ManagerSalary;

MySQL – Since MySQL doesn’t have INTERSECT operator so we can use the
subquery-

SELECT *
FROM EmployeeSalary
WHERE EmpId IN
(SELECT EmpId from ManagerSalary);

--------------------------------------------------------------------------
-----
```

13)SQL query to fetch records that are present in one table but not in another table.
Ans. SQL Server – Using MINUS- operator-

```
SELECT * FROM EmployeeSalary
MINUS
SELECT * FROM ManagerSalary;
```

MySQL – Since MySQL doesn’t have a MINUS operator so we can use LEFT join-

```
SELECT EmployeeSalary.*
FROM EmployeeSalary
LEFT JOIN
ManagerSalary USING (EmpId)
WHERE ManagerSalary.EmpId IS NULL;
-------------------------------------------------------------------------
------
```

15) fetch the EmpIds that are present in both the tables – ‘EmployeeDetails’ and ‘EmployeeSalary.

```
SELECT EmpId FROM
EmployeeDetails
where EmpId IN
(SELECT EmpId FROM EmployeeSalary);

-------------------------------------------------------------------------
------
```

16)display both the EmpId and ManagerId together.

```
SELECT CONCAT(EmpId, ManagerId) as NewId
FROM EmployeeDetails;
-------------------------------------------------------------------------
------
```

17)uppercase

```
SELECT UPPER(FullName), LOWER(City)
FROM EmployeeDetails;
-------------------------------------------------------------------------
------
```

18)employees who are not working on any project.

```
SELECT EmpId
FROM EmployeeSalary
WHERE Project IS NULL;
-------------------------------------------------------------------------
-------
```

22)employtee who joined in the Year 2020.

```
SELECT * FROM EmployeeDetails
WHERE YEAR(DateOfJoining) = '2020';


Select * from Worker where year(JOINING_DATE) = 2014 and
month(JOINING_DATE) = 2;
-------------------------------------------------------------------------
-------
```

23)join many tables

```
SELECT column1, column2
FROM TableA
JOIN TableB ON TableA.Column3 = TableB.Column3
JOIN TableC ON TableA.Column4 = TableC.Column4;
--------------------------------------------------------------------------
-------
```

24)lowest age 3 records

```
select distinct age from Customers order by age asc limit 3
--------------------------------------------------------------------------
-------
```

25)highest age 3 records

```
select distinct age from Customers order by age desc limit 3
--------------------------------------------------------------------------
--------
```

26)last 3 records

```
SELECT * FROM Customers order by customer_id desc limit 3.
--------------------------------------------------------------------------
--------
```

27) first 3 records

```
SELECT * FROM Customers order by customer_id asc limit 3...
--------------------------------------------------------------------------
--------
```

28)first 50 pernt record

```
SELECT *
FROM WORKER
WHERE WORKER_ID <= (SELECT count(WORKER_ID)/2 from Worker);

--------------------------------------------------------------------------
---------
```

29)second highest salry

```
Select max(Salary) from Worker
where Salary not in (Select max(Salary) from Worker);
--------------------------------------------------------------------------
--------
```

30) similar age

```
Select distinct W.customer_id, W.first_name, W.age
from Customers W, Customers W1
where W.age = W1.age
and W.customer_id != W1.customer_id;

--------------------------------------------------------------------------
--------
```

31)count of employees working in the department ‘Admin’.

```
SELECT COUNT(*) FROM worker WHERE DEPARTMENT = 'Admin';
--------------------------------------------------------------------------
--------
```

33)second-highest salary :

```
Select max(Salary) from Worker
```

```
where Salary not in (Select max(Salary) from Worker);
-------------------------------------------------------------------------
--------
```

34) third highhest salry

```
select max(salary)from Employee where salary < (select max(salary) from
Employee where salary < (select max(salary) from Employee) )


//REPLACE INTO person_tbl (last_name, first_name)
VALUES( 'Ajay', 'Kumar');
```