show databases;

show databases;

create database Fingertips;

use Fingertips;

show tables;

#Create Table Professionals

create table Professionals(

Professional\_ID int(3),

First\_Name varchar(10),

Last\_Name varchar(10),

Salary int(10),

Joining\_Date DATETIME,

Department varchar(10)

);

select \* from Professionals;

#Insert Value to Professionals Table

insert into Professionals(professional\_id,First\_Name,Last\_Name,Salary,Joining\_Date,Department)values

(001,"Mayank","Srivastava",100000,"2021-02-20 09:00:00","ENGINEER "),

(002,"Virat","Agnihotri",80000,"2021-06-11 09:00:00","Architect"),

(003,"Shubham","Srivastava",300000,"2021-02-20 09:00:00","ENGINEER"),

(004,"Sunil","Khurana",500000,"2021-02-20 09:00:00","Architect"),

(005,"Mohammad","Salman",500000,"2021-06-11 09:00:00","Architect"),

(006,"Prem","Modi",200000,"2021-06-11 09:00:00","Sales"),

(007,"Harsh","Shukla",75000,"2021-01-20 09:00:00","Sales"),

(008,"Pryag","Agarwal",9000,"2021-04-11 09:00:00","Architect"),

(009,"Anil","Rastogi",120000,"2021-02-20 09:00:00","Accounts"),

(010,"Amitabh","Singh",60000,"2021-06-11 09:00:00","Finance"),

(011," Jasbeer","Kaur",280000,"2021-02-20 09:00:00","Accounts"),

(012,"Srijan","Mahadev",500000,"2021-02-20 09:00:00","Sales"),

(013,"Mohammad","Salman",500000,"2021-06-11 09:00:00","Finance"),

(014,"Shakti","Khanna",230000,"2021-06-11 09:00:00","Engineer"),

(015,"Anand","Kapoor",45000,"2021-01-20 09:00:00","Accounts"),

(016,"Shiwali","Sethiya",22000,"2021-04-11 09:00:00","Architect"),

(017,"Virat","Jadeja",500000,"2021-06-11 09:00:00","Finance"),

(018,"Maan","Singh",200000,"2021-06-11 09:00:00","Engineer"),

(019,"Deepak","Pandey",78000,"2021-01-20 09:00:00","Accounts"),

(020,"Rahul","Sharma",9000,"2021-04-11 09:00:00","Architect");

delete from Professionals;

select \* from professionals;

set autocommit=0;

delete from Professionals;

rollback;

truncate table professionals;

select \* from professionals;

rollback;

select \* from professionals;

drop table Professionals;

select \* from professionals;

select \* from professionals;

#1 Write An SQL Query To Fetch “FIRST\_NAME” From professionals Table Using The Alias Name As <Employee\_Name>

select First\_Name as Employee\_Name from professionals;

select First\_Name Name from professionals;

#1A Write An SQL Query to Fetch First Name, Last Name, Salary of Rohit

select `First\_Name`,`Last\_Name`,`Salary` from professionals where `First\_Name`="Harsh";

select `First\_Name`,`Last\_Name`,`Salary` from professionals where `First\_Name`="Virat";

select `First\_Name`,`Last\_Name`,`Salary` from professionals where `First\_Name`="Virat" and `Last\_Name`="Jadeja";

select `First\_Name`,`Last\_Name`,`Salary` from professionals where `Salary`=500000 and `Department`="Architect";

select `First\_Name`,`Last\_Name`,`Salary` from professionals where 'salary'<300000;

select \* from professionals where 'salary'<300000 and `Department`="ENGINEER";

select \* from professionals where 'salary'<300000 and `Department`in ("ENGINEER","Architect");

select \* from professionals where salary between 300000 and 500000 and `Department`="Architect";

#2 Write An SQL Query To Fetch “FIRST\_NAME” In Upper Case.

select upper(First\_Name) from professionals;

select lower(First\_name) from professionals;

#3 Write An SQL Query To Fetch Unique Values Of DEPARTMENT From Professionals Table

select department from professionals;

select distinct DEPARTMENT from professionals;

select distinct first\_name from professionals;

#4 Write An SQL Query To Print The First Three Characters Of FIRST\_NAME From Professionals Table

select substring(first\_name,1,3) from professionals;

#3 No of character

select substring("I am student",6,7);

#5 Write An SQL Query To Find The Position Of The Alphabet (‘a’) In The First Name Column ‘Amitabh’ From Professionals Table.

select INSTR(First\_Name,'a') from professionals where First\_Name ="Amitabh";

select INSTR(First\_Name,'t') from professionals where First\_Name ="Amitabh";

select INSTR(First\_Name,Binary'a') from professionals where First\_Name ="Amitabh";

#6 Write An SQL Query To Print The FIRST\_NAME From Professionals Table After Removing White Spaces From The Right Side

select RTRIM(first\_name) from professionals;

#7 Write An SQL Query To Print The DEPARTMENT From Professionals Table After Removing White Spaces From The Left Side.

select LTRIM(Department) from professionals;

#8 Write An SQL Query That Fetches The Unique Values Of DEPARTMENT From Professionals Table And Prints Its Length

select distinct department, length(Department) from professionals;

#9 Write An SQL Query To Print The FIRST\_NAME From professional Table After Replacing ‘A’ With ‘a’

select replace(First\_Name,"a","A") from professionals;

select replace(First\_Name,"a"," ") from professionals;

select \* from professionals;

# 10. Write An SQL Query To Print The FIRST\_NAME And LAST\_NAME From Professional Table Into A Single Column COMPLETE\_NAME. A Space Char Should Separate Them

select CONCAT(First\_Name,' ',Last\_Name) as "Complete\_Name" from professionals;

#11. Write An SQL Query To Print All Details From The Professional Table and arrange as per FIRST\_NAME Ascending.

select \* from professionals order by First\_Name asc;

select \* from professionals order by Salary desc;

#12. Write An SQL Query To Print Details From The Professional Table Order By FIRST\_NAME Ascending And DEPARTMENT Descending.

select \* from professionals order by Salary;

select \* from professionals order by Salary desc;

select \* from professionals order by First\_NAME asc,Department desc;

select \* from professionals order by Department asc, Salary desc;

select \* from professionals order by Department asc, First\_Name desc;

select Department, Salary from professionals order by Department,Salary desc;

#13 Write An SQL Query To Print Details With The First Name As “Vipul” And “Satish” From Professional Table

select \* from Professionals where First\_Name in ('Virat',"Shubham");

# 14 Write An SQL Query To Print Details Excluding First Names, “Vipul” And “Satish” From Professional Table.

select \* from professionals where First\_Name not in ('Virat',"Shubham");

#15 Write An SQL Query To Print Details With DEPARTMENT Name As “Admin"

select \* from professionals where Department like "E%";

select \* from professionals where first\_name like "Sh%";

#16 Write An SQL Query To Print Details Whose FIRST\_NAME Ends With ‘A’

select \* from professionals where First\_Name like "%m";

#First Name start with a

select \* from professionals where First\_Name like "a%";

#17 Write An SQL Query To Print Details Whose FIRST\_NAME Contains ‘a’

select \* from professionals where First\_Name like "%ab%";

#18 Write an SQL Query to fetch name of people whose name starts with S and ends with L

select \* from professionals where last\_name like "s%a";

#19 Write An SQL Query To Print Details Whose FIRST\_NAME Ends With ‘m’ And Contains Six Alphabets

select \* from professionals where First\_Name like'\_\_\_\_\_\_m';

select \* from professionals where First\_Name like'\_\_r\_\_';

select \* from professionals where last\_Name like's\_\_\_\_a';

select \* from professionals where salary like '5\_\_\_\_\_';

select \* from professionals where salary like "5%";

#20 Write An SQL Query To Print Details Whose SALARY Lies Between 100000 And 500000. (#between includes both the values)

select \* from professionals where salary >=100000 and salary<=500000;

select \* from professionals where salary between 100000 and 500000;

select \* from professionals where joining\_date between "2021-02-20 09:00:00" and "2021-06-11 09:00:00";

# 21 Write An SQL Query To Print Details Of Professionals Who Have Joined In the year 2021

Select \* from professionals where year(JOINING\_DATE) = 2021;

Select \* from professionals where month(JOINING\_DATE) = 2;

Select \* from professionals where day(JOINING\_DATE) = 11;

Select \* from professionals where month(JOINING\_DATE) = 4 and day(JOINING\_DATE) = 11;

#Statistics

select max(salary) from professionals;

select min(salary) from professionals;

select max(salary) as max\_salary,min(salary) as min\_salary from professionals;

select avg(salary) from professionals;

select stddev\_pop(salary) from professionals;

select var\_pop(salary) from professionals;

select count(professional\_id) from professionals;

#21 Write An SQL Query To Fetch The Count Of number of people In The Department ‘Sales’.

SELECT COUNT(\*) FROM professionals WHERE DEPARTMENT = 'Sales';

#22 SubQuery

# Write An SQL Query To Print Details Whose SALARY Lies Between 100000 And 500000 (Same as Q20)

SELECT FIRST\_NAME, LAST\_NAME, Salary

FROM professionals

WHERE professional\_ID IN

(SELECT professional\_ID FROM professionals

WHERE Salary BETWEEN 100000 AND 500000);

#22 A Write An SQL Query To Show The Second Highest Salary From Professionals Table.

# Max Salary

select max(salary) from Professionals;

select max(salary) from professionals where salary not in (select max(salary) from professionals);

#22 B Write An SQL Query To Show The Second Lowest Salary From Professionals Table.

select min(salary) from Professionals;

select min(salary) from Professionals where salary not in (select min(salary) from Professionals);

#22 C Write An SQL Query To Fetch The Names Of employees Who Earn The Highest Salary.

SELECT FIRST\_NAME, SALARY from professionals WHERE SALARY=(SELECT max(SALARY) from professionals);

#22 D Write An SQL Query To Show The Last Record From A Table

Select \* from professionals where professional\_ID = (SELECT max(professional\_ID) from professionals);

Select \* from professionals order by professional\_ID DESC limit 1;

#22 E Write An SQL Query To Fetch The First Row Of A Table.

Select \* from professionals where professional\_ID = (SELECT min(professional\_ID) from professionals);

#23 Group By

#Write An SQL Query To Fetch The No. Of people For Each Department In The Descending Order

SELECT DEPARTMENT, count(professional\_ID) No\_Of\_Workers

FROM professionals

GROUP BY DEPARTMENT

ORDER BY No\_Of\_Workers DESC;

#24 Write An SQL Query To Fetch Average salary of Department (Use Order By)

select Department, AVG(Salary) from professionals group by Department;

select Department, max(salary) from professionals group by Department;

#25 Having

#Write An SQL Query To Fetch Duplicate Records Having Matching Data In Some Fields Of A Table

SELECT first\_name, Department, COUNT(first\_name)

FROM professionals

GROUP BY first\_name

HAVING COUNT(\*) > 1;

#25a Write an SQL Query to Fetch Average Salary of people having average salary>200000

select First\_Name, Last\_Name, Department ,AVG(Salary) as Average\_Salary

from professionals group by Department having Average\_salary>150000;

#25 B Write An SQL Query To Fetch The Departments That Have greater Than three People In It.

SELECT DEPARTMENT, COUNT(professional\_ID) as 'Number of Workers' FROM professionals

GROUP BY DEPARTMENT HAVING COUNT(professional\_ID) > 3;

#26 Write An SQL Query To Show Only Odd Rows

SELECT \* FROM professionals WHERE MOD (professional\_ID, 2) <> 0;

#27 Write An SQL Query To Show Only Even Rows

SELECT \* FROM professionals WHERE MOD (professional\_ID, 2) = 0;

#28 Write An SQL Query To Clone (Copy )A New Table From Another Table

create table Employee select \* from professionals;

show tables;

select \* from employee;

#29 Write An SQL Query To Show The Current Date And Time

SELECT CURDATE();

SELECT NOW();

#30 A Write a SQL Query to select to 4 records

select \* from professionals limit 4;

#31 Write An SQL Query To Show The Top N (Say 5) Records Of A Table

select \* from professionals order by Salary desc limit 5;

#32 Write an SQL Query to select first 3 records where department = engineer and Order by First\_Name

select \* from professionals where Department="Engineer" order by First\_Name asc limit 2;

#33 Write An SQL Query To fetch details of the sixth highest salary.

SELECT \* FROM professionals ORDER BY Salary desc LIMIT 5,1;

#34 Write a SQL Query to select to 4 records which start from 4

select \* from professionals limit 3,4;

#35 Write SQL Query to select 2 records of Architect department which starts from 3

select \* from professionals where Department="Architect" limit 2,2;

#36 Write An SQL Query To Fetch The First 50% Records From Professional Table.

SELECT \* FROM professionals

WHERE professional\_ID <= (SELECT count(professional\_ID)/2 from professionals);

#Alter

#37 Write An SQL Query To add New Column

select \* from professionals;

#Add

alter table professionals add column New\_Column varchar(10);

#38 Write an SQL Query to change the Data type of a column

#Data Type

alter table professionals modify column New\_Column int(10);

#39 Write an SQL Query to Remove a column

#Drop

ALTER TABLE professionals DROP COLUMN JOINING\_DATE;

#40 Write an SQL Query to Rename a column name

#Rename

alter table professionals rename column professional\_id to id;

select \* from professionals;

#41 Write An SQL Query To change the LAST\_NAME as Bhatt of worker\_id =005.

#Update

update professionals

set Last\_Name="Bhatt"

where Worker\_ID=004;

select \* from professionals;

#42 Write An SQL Query To change the Salary of Virat Agnihotri to 300,000

update professionals

set Salary= 300000

where `First\_Name`="Virat" and last\_name="Agnihotri";

select \* from professionals;

#43 Write an SQL Query to to change department of Abbas and Amitabh to Data Scientist

update professionals

set Department="Data Scientist"

where First\_Name in("Abbas","Amitabh");

#43 Write An SQL Query To delete the all details where id is 003.

Delete from professionals

Where professional\_id = 003;

#44 Write an SQL Query to delete all details where first\_name="Abbas"

delete from professionals where

first\_name="Abbas";

#45 #If Clause/Case

# Write An SQL Query To Add A class for 100000+ salary and B for others.

select \*, if(SALARY > 300000, "A","B") as class from professionals;

#46 CASE

SELECT First\_name, Last\_name,

CASE

WHEN Salary > 300000 THEN "The Class is A"

WHEN Salary <= 300000 and Salary >=100000 THEN "The Class is B"

ELSE "The Class is C"

end as Class

FROM Professionals;