Practical 4 - Use of String function, Relational Operators, Arithmetic Operators & Constraints in SQL

Create the following table Company in Database Office.

Branch no.	Name of the employee	Employee id	salary	Manager under work
01	Suresh	E1	25000	M1
02	Ramesh	E2	22000	M1
03	Dinesh	E3	21000	M2
04	Kalpesh	E4	20000	M1
05	Alpesh	E5	21600	M3
06	Adesh	E6	26000	M5
07	Rajesh	E7	27000	M3
08	Zareen	E8	30000	M4
09	Seema	E9	20000	M2
10	Esha	E10	27500	M2

Create a database OFFICE.

```
create database OFFICE;
```

Write a command to use the database OFFICE.

```
use OFFICE;
```

Create a table Company.

```
create table Company (branch_no smallint ,
emply_name varchar(20),EMP_id varchar(20), salary smallint, manager_id varchar(20));
```

Describe table Company.

```
describe Company;
```

Insert the values in table Company.

```
insert into Company values(01, 'Suresh', 'E1', 25000,'M1'),(02, 'Ramesh','E2', 22000,'M1'),(03,
'Dinesh', 'E3', 21000,'M2'),(04, 'Kalpesh','E4',20000,'M1'),(05, 'Alpesh','E5',21600,'M3'),(06,
'Aadesh', 'E6',26000,'M5'),(07, 'Rajesh','E7',27000,'M3'),(08, 'ZAREEN','E8',30000,'M4'),(09,
'SEEMA', 'E9',20000,'M2'),(10, 'Esha','E10',27500,'M2');
```

Display all the employee details in Company.

```
select *from Company;
```

Count total number of employees having a salary.

```
Select count(salary) from company;
```

Find the most maximum salary paid by the company.

select max(salary) from Company;

Find the most minimum salary paid by the company.

select min(salary) from Company;

Find the average salary paid by the company.

select avg(salary) from Company;

Find the total salary paid by the company.

select sum(salary) from Company;

Alternatively, one can find count, max, min, average and total salary in a single query.

Select count(salary), max(salary), min(salary), avg(salary), sum(salary) from company;

Find the details of the employee who received a salary less than 21000.

select *from company where salary <=21000;

Find the details of the employee who received a salary more than 21000.

select *from company where salary >=21000;

Find the details of the employee whose salary is 30000.

select *from company where salary=30000;

Find the details of the employees whose salary is not 30000.

select *from company where salary !=30000;

Notice here that using query select max(salary) from Company; **you get output** 30000 **and using the query** select *from company where salary=30000; **you get detailed output.**

In order to get the details of employees having maximum salary enter the following

select *from company where salary=(select max(salary) from Company);

In order to get the details of employees having minimum salary enter the following

select *from company where salary=(select min(salary) from Company);

Find the details of employees whose name starts with A.

select branch_no,emply_name,EMP_id,salary from company where emply_name like 'a%';

Find the details of employees whose name does not start with A.

select branch_no,emply_name,EMP_id,salary from company where emply_name not like 'a%';

Find the details of the employee E3 and E7.

select branch_no,emply_name,EMP_id,salary from company where EMP_id in('e3' ,'e7');

Find the details of employees who receive salaries between 21000 and 23000.

select branch_no,emply_name,EMP_id,salary from company where salary between 21000 and 23000;

Add column of DA, HRA and Gross_Income in the table company

alter table company add(DA bigint);

alter table company add(HRA bigint);

alter table company add(Gross_Income bigint);

Set the records in the column of DA,HRA and Gross_Income

Update company set DA=(Select 20*salary/100);

Update company set HRA=(select 10*salary/100);

Update company set Gross_income=(select salary+DA+HRA);

Select * from company;

Show the names of the employees in upper case.

```
select upper(emply_name) from company;
```

Show the names of the employees in lower case.

```
select lower(emply_name) from company;
```

Find the length of characters in the column emply_name

```
Select length(emply_name) from company;
```