

SQL

1.What are Scalar functions and write a query?

A user defined function written in sql and it returns a single value it is involved.

The function which return only a single value from an input value.

LENGTH()

Length('string')

```
select LENGTH(ename)
from emp;
```

2.Explain joins with example and output?

The process of retrieving the data from multiple tables simultaneously is known as joins

QUERY

```
select *
from EMP
where EMP.deptno in DEPT.deptno;
```

OUTPUT

ENAME	DEPTNO	DNAME	DEPTNO
SHANKAR	36	D1	10
AJAY	19	D2	20
VIGNESH	20	D3	30

3.Write a SQL query to Rename the column name

Alter table table name
rename column existing column name to new column name;

EX

```
ALTER TABLE STUDENT
RENAME COLUMN PHNO TO MOBILE NUM;
```

4.Write a SQL query to find duplicate records?

```
select *
from student
Group by student id
Having count (student id)>1;
```

5.How do we use the DISTINCT statement? What are its use?

Distinct is used to remove the duplicated repeated value from the result table
distinct always return as a first argument in select clause.

```
select Distinct sal
from emp;
```

6.Remove duplicate from the table?

```
select Distinct sal  
from temp;
```

7.Print max salary for a particular department?

```
select Max(sal)  
from dept  
where Dname='MARKETING';
```

8.Use different operators in SQL?

Arithmetic operator (+ - * /)
concatination operator (||)
logical operator (AND, OR, NOT)
Relational operator (<, >, <=, >=)
Comparison operator (=, !=)
special operator(IN, NOT IN, BETWEEN, NOT BETWEEN, LIKE, NOT LIKE, IS, ISNOT)
Sub query operator(ALL, ANY, EXIST, NOT EXIST)

9.What is Query to display first 5 Records from Employee table?

```
select top5*  
from emp;
```

10.What is Query to display last 5 Records from Employee table?

```
select*  
from emp  
where ID>(select count(*)  
          from emp)-5;
```

11.How to fetch 3rd highest salary using Rank Function?

```
select sal,RANK(3),over(order by sal desc)RANK  
from emp ;
```

12.How Can i create table with same structure with data of Employee table?

```
CREATE TABLE TEMP_EMP  
AS  
SELECT *  
FROM EMP;
```

13.Find Query to get information of Employee where Employee is not assigned to the department

```
SELECT *  
FROM EMP  
WHERE DEPT IS NULL;
```