

Structured query language

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

-- Create a new table

```
create table Wanted(ID integer, Name text, Rank integer);
```

-- insert values in the table

```
insert into Wanted
```

```
values(001,'Vikram',2),(002,'Dhilli',3),(003,'Rolex',1)
```

```
, (004,'Amar',4),(005,'Santhanam',5),(006,'tinna',6),
```

```
(007,'Prabhanjan',7),(008,'Bejoy',8), (009,'Lokesh',9),
```

```
(010,'Sampath',10);
```

-- Showing the table

```
select * from Wanted where ID <= 5;
```

```
select * from Wanted where Rank < ((select count (*) from  
Wanted )-4)
```

2. Explain joins with example and output.

A JOIN clause is used to combine rows from two or more tables, based on a related column between them.

- INNER JOIN: Returns records that have matching values in both tables
- LEFT OUTER JOIN: Returns all records from the left table, and the matched records from the right table
- RIGHT OUTER JOIN: Returns all records from the right table, and the matched records from the left table
- FULL OUTER JOIN: Returns all records when there is a match in either left or right table

Sample Program

--Create table

```
create table Student (ID integer,Name text,Rank integer,Adress text);
```

-- insert values in the table

insert into Student values

```
(1,'Ram',2,'Ranipet'),(2,'Hari',3,'thiruvanamallai'),(3,'Jaya',1,'Selam')  
,(4,'Vinoth',4,'vellore');
```

-- Showing the table

```
create table Teacher (ID integer,Name text,Address text);
```

insert into Teacher values

```
(1,'Rajesh','Chennai'),(2,'Hari',3,'Arcot'),(33,'Jaya','vellore')  
,(44,'Vinoth','selam');
```

-- Joint Operator

```
SELECT *FROM Student Inner join Teacher ON Student.ID = Teacher  
.ID;
```

```
SELECT *FROM Student Right Join Teacher ON  
Student.ID = Teacher .ID;
```

```
SELECT *FROM Student Left Join Teacher ON  
Student.ID = Teacher .ID;
```

```
SELECT *FROM Student Full Outer Join Teacher  
ON Student .ID = Teacher.ID;
```

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

-- Create a new table

```
create table Wanted(ID integer, Name text, Rank integer);
```

-- insert values in the table

```
insert into Wanted
```

```
values(001,'Vikram',2),(002,'Dhilli',3),(003,'Rolex',1)  
,(004,'Amar',4),(005,'Santhanam',5),(006, 'Tinna',6),  
(007,'Prabhanjan',7),(008,'Bejoy',8), (009,'Lokesh',9),  
(010,'Sampath',10);
```

-- Showing the table

```
select * from Wanted where Rank > ((select count (*) from Wanted  
) - 5)
```

4. Write a SQL query to Rename the column name.

-- Create Table

```
Create table Student (Roll_No int, Name text, Age int);
```

-- Insert Value

```
insert into Student values (21,'Billy',15),(31,'johnny',18),(61,'Sim',20);
```

-- Alter Table

```
ALTER TABLE Student RENAME COLUMN NAME TO Children;
```

-- Show Table

```
Select * from Student;
```

5. How to fetch 3rd highest salary using Rank Function

-- Create Table

```
create table emoloyee (name text,ID int ,salary int);
```

-- Insert Value

insert into employee values

```
('Ram',21,2000),('Bucher',11,3000),('Danny',22,4400),('Groot',12,2300);
```

-- Show Table

```
SELECT * FROM `employee` WHERE salary = ( SELECT  
DISTINCT(`salary`) FROM `employee` ORDER BY `salary` DESC LIMIT 1  
OFFSET 2);
```