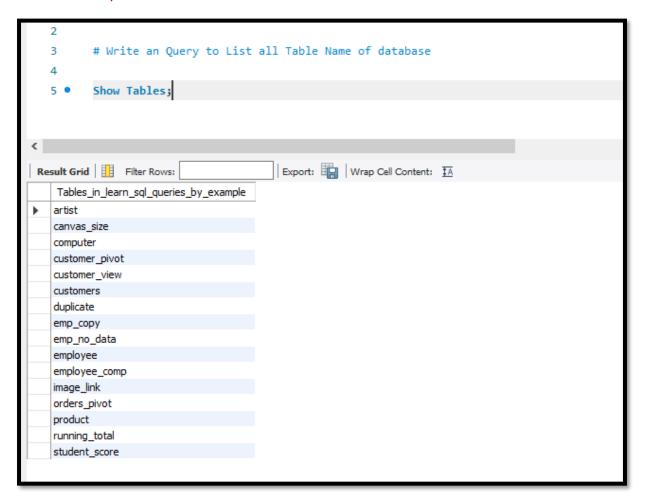
30 SQL MOST COMMONLY USED QUERY FOR DATA ANALYSIS

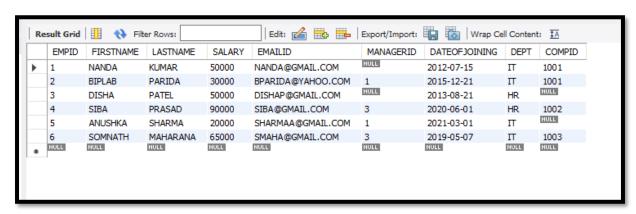
Write an Query to List all Table Name of database



Show all record of Computer Table

```
# Write an Query to show all record of tables ?
   4
   5
         Select * from employee_comp;
   6 •
   7
         Select * from computer;
   8
                                         | Edit: 🚄 🖶 🖶 | Exp
COMPID
            BRAND
                   COMPMODEL
                               MANUFACTUREDATE
                   T480
   1001
                              2019-06-12
           Lenovo
   1002
                   T490
                              2020-08-24
           Lenovo
   1003
           SONY
                   SQ112
                              2019-12-01
                              2020-12-21
   1004
           SONY
                   SX1001
   NULL
           NULL
                  NULL
                              NULL
```

Employee Table Data:



Update the joining Date to 15 july 2012 of employee id 1;

```
# Update the joining Dtae to 15 july 2012 of employee id 1;

Update EMPLOYEE_Comp

set DATEOFJOINING = '2012-07-15'

where EMPID = 1;

-- Above we are using DML(Data Manupulation Language Command to update the Date of Joining of Employee

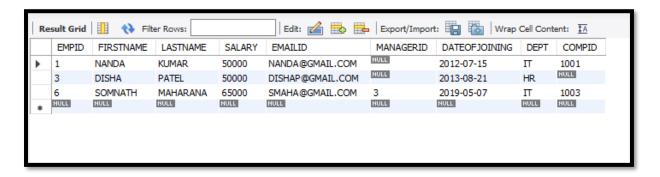
-- Update keyword is used to update the data in table

-- Set keyword is used to assign the value which we want to update with column anme and value

-- Where Clause is used to perform the conditional operation on table.
```

Find the All Employee whose salary between 40000 to 80000;

```
# Find the Employee whoes salary between 40000 to 80000;
 8
 9 •
       Select * from EMPLOYEE_Comp
       where Salary between 40000 and 80000;
10
11
12
       -- Above we are fetching all the Employee record whoes salary between 40000 to 80000
13
       -- Between : Using Between Operator , We can define the range
14
15
        -- Where Clause : Using Where Claues we can filter the data
16
17
```

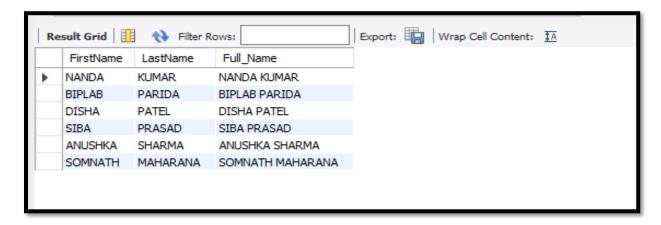


Find All the Employee With Name Starting with 'S';

```
# Find All the Employee With Name Starting with 'S';
 8
 9 •
       Select * from EMPLOYEE Comp
10
       where FirstName Like '%S';
11
12
        -- Above we are fetching all the Employee Whose Name Start with S Aplhabet.
13
        -- Like : Using Like Operator , We can find the specific pattern in data
14
        -- Where Clause : Using Where Claues we can filter the data
15
16
| Edit: 🕝 🖶 | Export/Import: 🏭 👸 | Wrap Cell Content: 🖽
  EMPID FIRSTNAME LASTNAME
                            SALARY
                                    EMAILID
                                           MANAGERID
                                                        DATEOFJOINING DEPT COMPID
                   NULL
                            NULL
                                            NULL
                                                                     NULL
 NULL
        NULL
```

Show First Name & last Name as Employee Full Name;

```
7
       # Show First Name & last Name as Employee Full Name;
 8
 9 •
       Select
10
           FirstName, LastName,
           concat(FirstName, ' ', Lastname) as Full_Name
11
        from EMPLOYEE_Comp ;
12
13
14
       -- Above we are Combining the First Name & last Name
15
       -- Concat() : Using Concat() we can combine the value/data in one
16
```



Find All the Eeployee Whose First Name ends with A and contain 4 alphabets;

```
# Find All the Eeployee Whose First Name ends with A and contain 4 alphabets;

Select

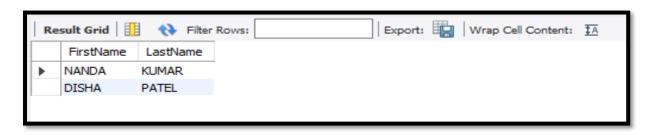
FirstName, LastName

from EMPLOYEE_Comp

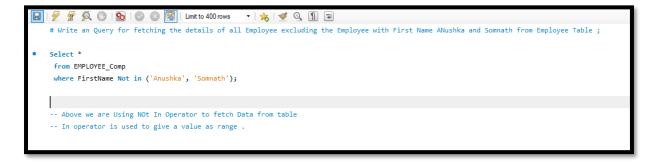
where FirstName like '___A';

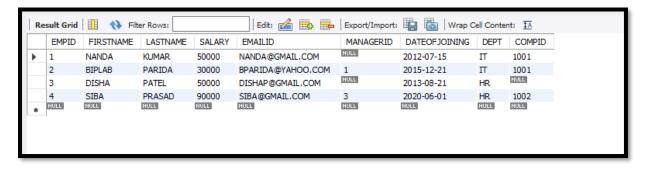
-- Where we are Uling Like Operator to find the String Pattern in FirstName

-- Using Where Clause, we are vefiyinh the contion .
```



Write an Query for fetching the details of all Employee excluding the Employee with First Name 'Anushka' and 'Somnath' from Employee Table;

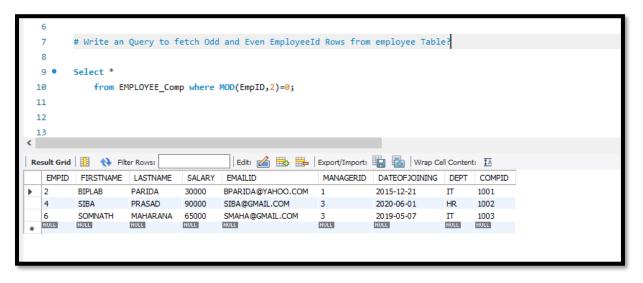




Write an Query for showing the Current Date;

```
# Write an Query to fetch Employee First Name and Replace A with '@'
       Select FirstName, replace(Firstname, 'A', '@') as Name_After_Replacing from EMPLOYEE_Comp;
10
11
       -- Above, We are replacing the A alphabet in FirstName with @
12
       -- Replace() : Is used to replace the value, It takes 3 parameter , Replace(Data to Replace in , Replace_Value, Replace_With)
14
 sult Grid | 🔢  Filter Rows:
                                      Export: Wrap Cell Content: IA
 BIPLAB
          BIPL@B
 DISHA
           DISH@
 STBA
          STB@
 ANUSHKA
           @NUSHK@
 SOMNATH SOMN@TH
```

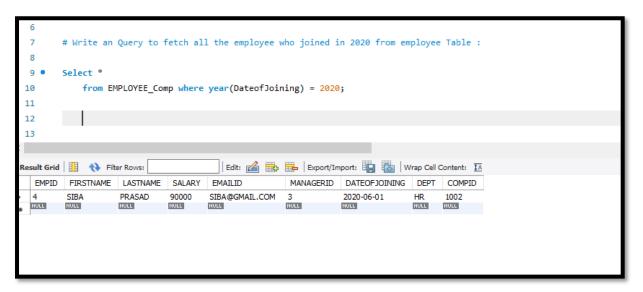
Write an Query to fetch Even EmployeeId Rows from employee Table?



Write an Query to fetch Odd Employeeld Rows from employee Table?

```
# Write an Query to fetch Odd EmployeeId Rows from employee Table?
 7
 8
        Select *
 9 •
 10
           from EMPLOYEE Comp where MOD(EmpID, 2) !=0;
 11
12
 13
                                      | Edit: 🚄 🖶 | Export/Import: 识 🐻 | Wrap Cell Content: 🖽
EMPID FIRSTNAME LASTNAME
                             SALARY
                                                        MANAGERID DATEOFJOINING DEPT COMPID
                                                       NULL
         NANDA
                   KUMAR
                             50000
                                    NANDA@GMAIL.COM
                                                                  2012-07-15
                                                                                IT
                                                                                      1001
  1
                                                                                      NULL
  3
         DISHA
                   PATEL
                             50000
                                    DISHAP@GMAIL.COM
                                                                  2013-08-21
                                                                               HR
                                                                                      NULL
         ANUSHKA
                   SHARMA
                             20000
                                    SHARMAA@GMAIL.COM
                                                                  2021-03-01
                                                                                Π
                                                                                    NULL
                                                       NULL
                                                                               NULL
 NULL
        NULL
                   NULL
                            NULL
                                    NULL
                                                                  NULL
```

Write an Query to fetch all the employee who joined in 2020 from employee Table:



Write an Query to fetch Email Domain from email Address from employee Table?

```
# Write an Query to fetch Email Domain from emial Address from employee Table :
 8
 9 •
       Select
           EmailId,
10
           substr(EmailId, instr(EmailId, '@')+1) as Email_Domain from EMPLOYEE_Comp;
11
13
       -- Above, We are Extracting the Specific text from the Email
       -- substr() : Substr() is used to extract the data from String Data
14
       -- INSTR() function returns the position of the first occurrence of a string in another string
15
17
                                     Export: Wrap Cell Content: 🔼
Email_Domain
 NANDA@GMAIL.COM
                    GMAIL.COM
  BPARIDA@YAHOO.COM YAHOO.COM
  DISHAP@GMAIL.COM
                    GMAIL.COM
  SIBA@GMAIL.COM GMAIL.COM
  SHARMAA@GMAIL.COM GMAIL.COM
 SMAHA@GMAIL.COM GMAIL.COM
```

Write an Query to create a table with Data and Structure copied from another Table?

```
# Write an Query to create a table with Data and Structure copied from another Table?
       Create table Emp_Copy
10

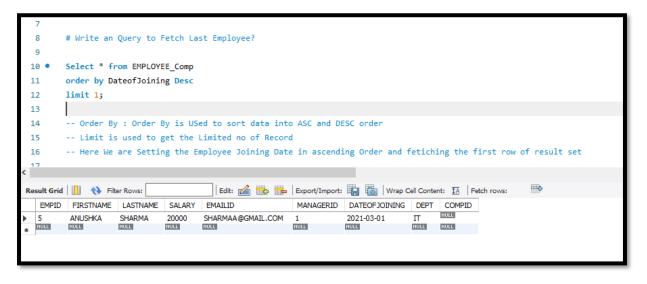
    as (
11
           Select *
12
           from EMPLOYEE_Comp
13
           );
14
       # Showing data Of Copied Table
15
        Select * from Emp_Copy;
16 •
17
                                     Export: Wrap Cell Content: TA
EMPID FIRSTNAME LASTNAME
                                                      MANAGERID DATEOFJOINING DEPT COMPID
                             SALARY EMAILID
                                                      NULL
                   KUMAR
                             50000
                                    NANDA@GMAIL.COM
                                                                 2012-07-15
                                                                               Π
  2
        BIPLAB
                  PARIDA
                             30000
                                    BPARIDA@YAHOO.COM 1
                                                                2015-12-21
                                                                              IT
                                                                                    1001
                                                      NULL
  3
        DISHA
                  PATEL
                             50000
                                    DISHAP@GMAIL.COM
                                                                 2013-08-21
                                                                              HR
                             90000
                                                     3
  4
                                    STBA@GMATL.COM
                                                                                    1002
        STBA
                  PRASAD
                                                                 2020-06-01
                                                                              HR
  5
        ANUSHKA
                  SHARMA
                             20000
                                    SHARMAA@GMATL.COM 1
                                                                 2021-03-01
                                                                              П
  6
        SOMNATH
                  MAHARANA 65000
                                    SMAHA@GMAIL.COM
                                                    3
                                                                 2019-05-07
                                                                              IT
                                                                                  1003
```

Write an Query to Fetch Top 3 Highest Salary?

```
8
        # Write an Query to Fetch Top 3 Highest Salary?
 9
 10
        Select Salary From
 11
                        Select Distinct Salary
 12
                                from EMPLOYEE_Comp
13
                                Order By Salary DESC
 14
 15
                                Limit 3
 16
                    ) tbl;
 17
        -- Here We are using InnerQuery/SubQuery
 18
        -- Distinct : The Distinct Kewword help us to get the Unique Value form Column
 19
        -- Order By : Order By is USed to sort data into ASC and DESC order
        -- Limit is used to get the Limited no of Record
 20
        -- Here we are firstly, Finding the Unique Slary from Table and
 21
        -- sorting them In high to Low and then We are setting Limit to show onlt 3 Rows
 22
Export: Wrap Cell Content: IA
  Salary
  90000
  65000
  50000
```

```
# Write an Query to Fetch First Employee?
 9
       Select * from EMPLOYEE_Comp
 10 •
 11
       order by DateofJoining asc
       limit 1;
 12
 13
       -- Order By : Order By is USed to sort data into ASC and DESC order
 14
       -- Limit is used to get the Limited no of Record
       -- Here We are Setting the Employee Joining Date in ascending Order and fetiching the first row of result set
 16
 18
                                    | Edit: 👍 📆 📇 | Export/Import: 📳 🐻 | Wrap Cell Content: 🏗 | Fetch rows:
MANAGERID DATEOFJOINING DEPT COMPID
  EMPID FIRSTNAME LASTNAME SALARY EMAILID
                                                  NULL
                                  NANDA@GMAIL.COM
                                                             2012-07-15
                                                  NULL
```

Write an Query to Fetch Last Employee?



```
# Write an Query to Fetch Total Employee in each Department ?
 8
 9
        Select
10 •
11
               Dept,
12
               Count(*) as Total_Employee
13
       from EMPLOYEE Comp
14
       Group By Dept;
15
16
       -- Group By : Group By is Used to Group The Common Data/Value as One Value
        -- Count() : Count is used to Coun the Total data/ value in column/table
        -- Here We are Grouping the Department and Counting the Total Employee Count.
19
20
Export: Wrap Cell Content: IA
  Dept Total_Employee
  π
       4
 HR 2
```

Write an Query to Create COPIED Table from existing table with no data?

```
# Write an Query to Create COPIED Table forom existing table with no data?

Create Table Emp_No_data as

(
Select * from employee_comp where 1=0

7

)

8

-- Above We are creating a Table Name: Emp_no_data from Employee_comp and passing the condition where 1=0, that is false,
-- So by this, we can copy of table structure form another tbale without coping the data

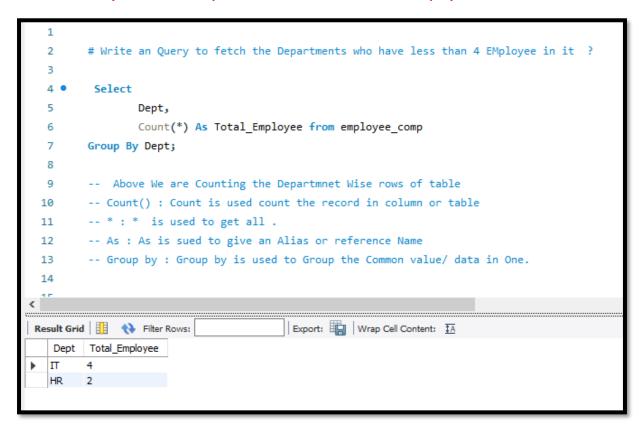
COUTPUT

Action Output

# Time | Action | Message
| Time | Action | Action | Message |
|-- Time | Action | Output |
|-- Time | Action | Message |
|-- Time | Action | Output |
|-- Time | Action | Message |
|-- Time | Action | Output |
|-- Time | Action | Outp
```

```
# Write an Query to count total rows in a table ?
  3
         Select Count(*) As Total Rows from employee comp;
  4 •
        -- Above We are Counting the rows of table
  6
  7
        -- Count() : Count is used count the record in column or table
        -- * : * is used to get all .
        -- As : As is sued to give an Alias or reference Name
 10
 11
 12
Export: Wrap Cell Content: IA
  Total_Rows
```

Write an Query to fetch the Departments who have less than 4 EMployee in it?

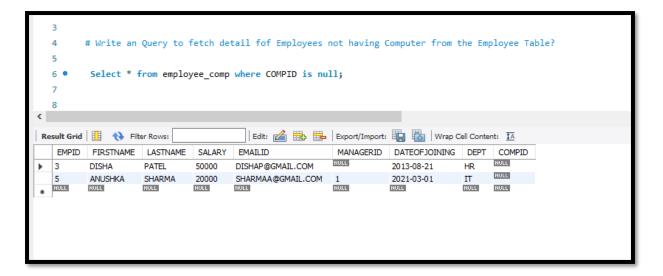


```
2
  3
         # Write an Query to fetch the Departments who have less than 4 EMployee in it ?
  4
         Select
  6 •
  7
                Dept,
  8
                Count(*) As Total_Employee from employee_comp
  9
        Group By Dept
        having Total_Employee < 4;</pre>
 10
 11
 12
         -- Above We are Counting the Departmnet Wise rows of table
 13
         -- Count() : Count is used count the record in column or table
        -- * : * is used to get all .
 14
         -- As : As is sued to give an Alias or reference Name
 15
        -- Group by : Group by is used to Group the Common value/ data in One.
 16
         -- Having : Having Clause is used apply the Condition on Aggregate Value
 17
 18
Export: Wrap Cell Content: IA
   Dept Total_Employee
▶ HR
```

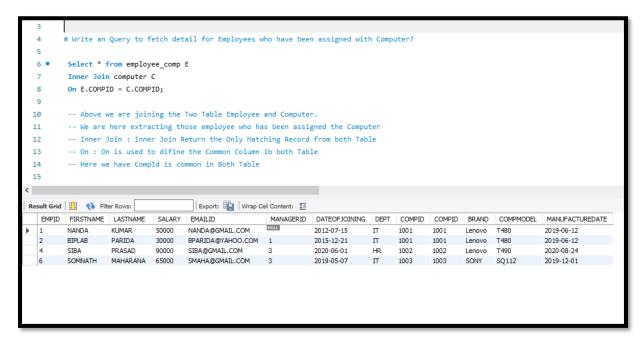
Write an Query to fetch the Departments Wise MAximum Salary?

```
\mbox{\tt\#} Write an Query to fetch the Departments Wise MAximum Salary ?
         Select
               Dept,
 8
               max(Salary) As Max_Saalry from employee_comp
 9
        Group By Dept:
10
11
        -- Above We are Calculating the Maximum Salary and grouping them department wise
 12
        -- Max() : Max() Is an agrregate Method that help us to find /calculate the Maximum/ Highest values in our column / Table
 13
        -- As : As is used to give an Alias or reference Name
14
        -- Group by : Group by is used to Group the Common value/ data in One.
15
16
17
Export: Wrap Cell Content: IA
  Dept Max_Saalry
  IT
        65000
  HR 90000
```

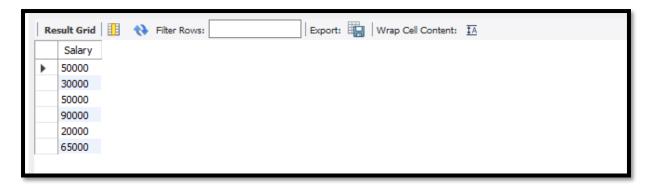
Write an Query to fetch detail for Employees not having CompID from the Employee Table?

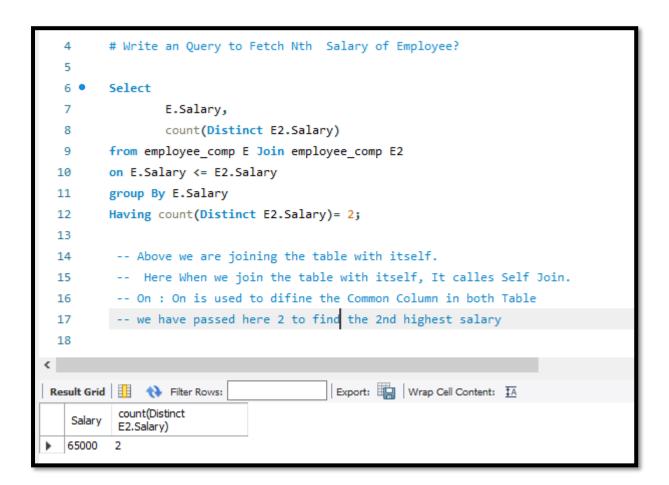


Write an Query to fetch detail for Employees who have been assigned with Computer?



Write an Query to Fetch Nth Salary of Employee?





```
# Write an Query to Fetch Nth Salary of Employee Using dense_rank()?
  6
 7

⊖ Select * from (
                        Select
                               Distinct Salary,
 q
 10
                               dense_rank()
 11
                                over(Order by salary Desc) as Sal_DRank
                               from employee_comp
 12
 13
                     ) tbl_sal_rank
        where tbl_sal_rank.Sal_DRank = 2;
 14
 15
 16
         -- Above we are Window Function.
         -- Dense_Rank() : Dense_Rank Assign the Unique Ranking to Each Value in Dataset
17
18
         -- So Here we are using the dense rank to assign unique ranking to all Unique salary
         -- Over(): We also used here over clause to partition the data and sorting the data
19
 20
         -- we have passed here 2 to find the 2nd highest salary,
         -- We can pass any Number to find the N th Salary
 21
                                       Export: Wrap Cell Content: IA
Salary Sal_DRank
  65000
```

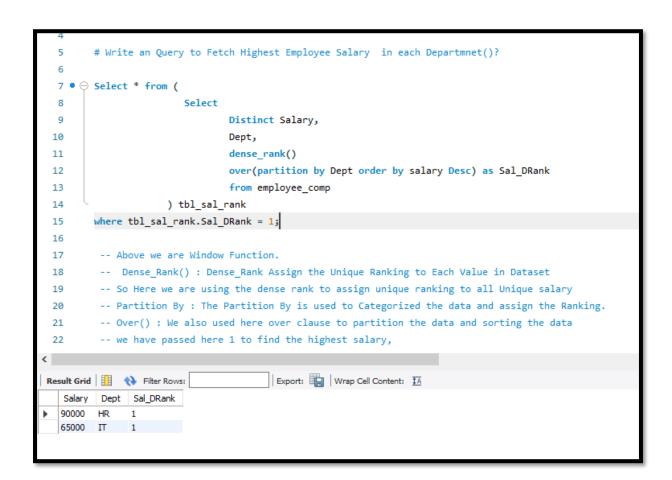
Write an Query to assign the Unique Ranking to each salary in each Department?

```
2
       # Write an Query to assign the Unique Ranking to each salary in each Departmnet()?
 4
 5
                        Select
                               Distinct Salary,
 6
                               Dept,
                                dense rank()
                                over(partition by Dept order by salary Desc) as Sal_DRank
                       from employee comp ;
11
        -- Above we are Window Function.
        -- Dense_Rank() : Dense_Rank Assign the Unique Ranking to Each Value in Dataset
13
        -- So Here we are using the dense rank to assign unique ranking to all Unique salary
15
        -- Partition By : The Partition By is used to Categorized the data and assign the Ranking.
        -- Over() : We also used here over clause to partition the data and sorting the data
17
        -- we have passed here 2 to find the 2nd highest salary,
        -- We can pass any Number to find the N th Salary
18
```

Write an Query to Fetch Highest Employee Salary in each Department?

Salary data Department wise Below shown:





Please give your feedback to enhance more Analytical Skill on SQL Tools.

Thank You [©]

Follow Me on LinkedIn: https://www.linkedin.com/in/vivekvishwas/

Follow Me on GitHub: https://github.com/Official-Vivek-Singh/