

* Assignment no:- 2 *

- Practice dataset

→ employee Table.

| EmpID | EmpName | Gender | Salary | City |
|-------|---------|--------|--------|-----------|
| 1 | Aarjun | M | 75000 | Pune |
| 2 | Ekdanta | M | 125000 | Bangalore |
| 3 | Lalita | F | 150000 | Mathura |
| 4 | Madhav | M | 250000 | Delhi |
| 5 | Visakha | F | 120000 | Mathura |

→ employee detail Table

| EmpID | Project | EmpPosition | DOJ |
|-------|----------------|-------------|------------|
| 1 | P ₁ | Executive | 26-01-2019 |
| 2 | P ₂ | Executive | 04-05-2020 |
| 3 | P ₁ | Lead | 21-10-2021 |
| 4 | P ₃ | Manager | 29-11-2018 |
| 5 | P ₂ | Manager | 01-08-2020 |

- i) Find the list of employees whose salary ranges between 2L to 3L.

Select * from employee
where salary between 200000 and 300000;

2] Write a query to retrieve the list of employee from the same city.

```
Select * from employee e1
where exists (select 1 from employee e2
where e1.city = e2.city and e1.empID <> e2.
empID);
```

3] Query to find null values in employee table.

```
Select * from employee
where empname is null or Gender is null
or salary is null or city is null;
```

4] Query to find the cumulative sum of employee's salary.

```
Select empID, empname, salary, sum(salary)
over(order by empID) as
cumulative salary from employee;
```

5] What's the male & female employee's ratio.

```
Select Gender,
count(*) as count from employee
group by Gender;
```

6] Query to Fetch 50% records from employee table.

```
Select * from employee
order by empID Limit (select count(*)/2
from employee);
```


7] Query to fetch employee's salary but replace last 2 digits with 'XX' i.e. 12345 will be 123XX.

```
Select EmpID, EmpName, concat(left(salary,
length(salary)-2), 'XX') as modified salary
from employee;
```

8] Query to fetch even and odd rows from employee table.

- even rows =

```
Select * from employee where MOD(EmpID, 2) = 0;
```

- odd rows =

```
Select * from employee where MOD(EmpID, 2) = 1;
```

9] Write query to find all employee names whose name:-

- Begin with 'A'.

```
Select * from Employee where empname like 'A%';
```

- Contains 'A' alphabet at second place

```
Select * from employee where empname like '%A%';
```

- Contains 'Y' alphabet at second last place

```
Select * from employee where empname like '%Y%';
```

- Ends with 'L' and contains 4 alphabets

```
Select * from employee where empname like '____L';
```

- Begins with 'V' and ends with 'A'.

```
Select * from employee where empname like 'V%A';
```

10] Write a query to find the list of employee names which is:

- starting with vowels (a, e, i, o, u) without duplicate

Select distinct empname from employee
where empName Regexp '^[aeiouAEIOU]';

- ending with vowels (a, e, i, o, u) without duplicates

Select distinct Empname from employee
where empName Regexp '[aeiouAEIOU]\$';

- Starting & ending with vowels (a, e, i, o, u) without duplicates.

Select distinct empname from employee
where empname Regexp '^[aeiouAEIOU].*[aeiouAEIOU]\$';

11] Find n^{th} highest salary from employee table with and without using the TOP/LIMIT keywords.

- using limit =

Select Distinct salary from employee
order by salary desc limit N-1, 1;

- without limit =

Select Salary from employee e1
where (N-1) = (select count(Distinct Salary)
from employee e2 where e2.salary > e1.salary);

12] Write query to find and remove duplicate record from a table.

- Find duplicates =

```
Select empname, count(*) from employee  
group by empname having count(*) > 1;
```

- Remove duplicates =

```
Delete e1 from employee e1 Inner join employee  
e2 on e1.empname = e1.empname and e1.empID  
> e2.empID;
```

13] Query to retrieve the list of employees working in same project.

```
Select e1.* from employee detail e1  
where exists (select 1 from employee detail e2  
where e1.project = e2.project and e1.empID <>  
e2.empID);
```

14] Show the employee with highest salary for project

```
Select Project, empID, salary from employee detail  
ed Join employee e on ed.empID = e.empID  
where (Project, salary) IN (select Project,  
Max(salary) from employee detail ed2 Join  
employee e2 on ed2.empID = e2.empID  
group by project);
```

15] Query to find total count of employees joined each year.

```
Select year(DOJ) as Joining year, count(*) as  
employee count from employee detail group by  
year(DOJ);
```

16] Create 3 groups based on salary col, salary less than 1L is low, betⁿ 1-2L is medium & above 2L is high.

```

Select EmpID, EmpName, Salary,
       Case
         when Salary < 100000 then 'low'
         when salary between 100000 and 200000
         then 'medium'
         else 'high'
       End as salary Group
from employee;

```