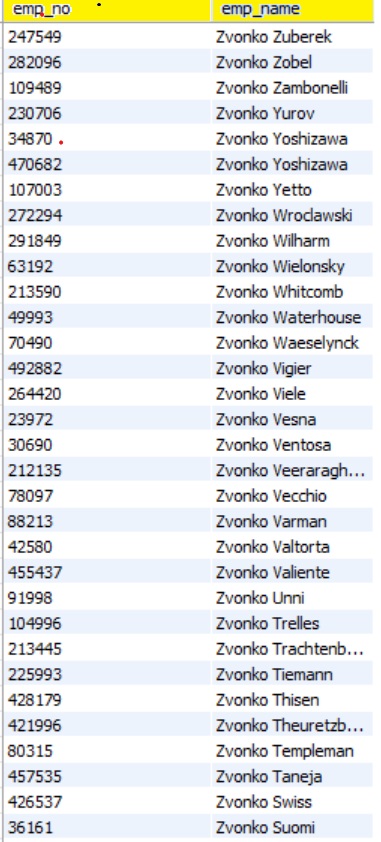
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| Employee Data Report  ETLV done by using SQL and POWER Bi  **By: Bhawna Sharma**  **Data Source- Employee Database from MySQL website** |
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# Sample SQL Queries used to explore data

### 1)Listing for all the Employees in the company: -

select emp\_no, concat(first\_name, ' ', last\_name)as emp\_name from employees

order by emp\_name desc;



### 2)Listing for all the departments in the company: -

select dept\_no, dept\_name from departments order by dept\_no asc;

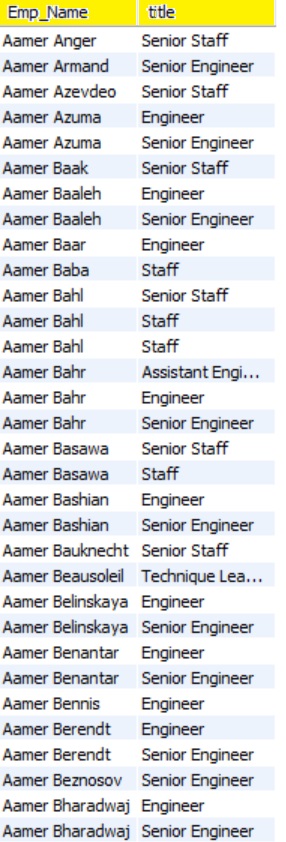


### 3)Listing all employees with their current titles: -

select concat(employees.First\_name, ' ', employees.last\_name) as Emp\_Name, titles.title from employees

inner join titles on employees.emp\_no = titles.emp\_no

order by Emp\_Name asc limit 50;



## Data Analysis using SQL

### 2.1) Total Number of Employees working in the organization:

select count(emp\_no) from titles

'443308' employees in the organization.

### 2.2) Average salary by department

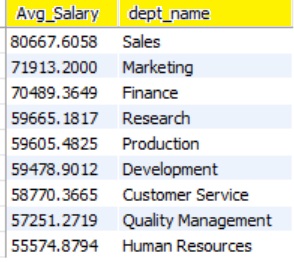
select avg(salaries.salary) as Avg\_Salary, departments.dept\_name from salaries

inner join employees on employees.emp\_no = salaries.emp\_no

inner join dept\_emp on employees.emp\_no = dept\_emp.emp\_no

inner join departments on dept\_emp.dept\_no= departments.dept\_no

group by departments.dept\_name order by Avg\_Salary desc;



### 2.3) Top 10 highest paid employees

SELECT employees.emp\_no, first\_name, last\_name, max\_salary

FROM

(SELECT emp\_no, MAX(salary) AS max\_salary FROM salaries

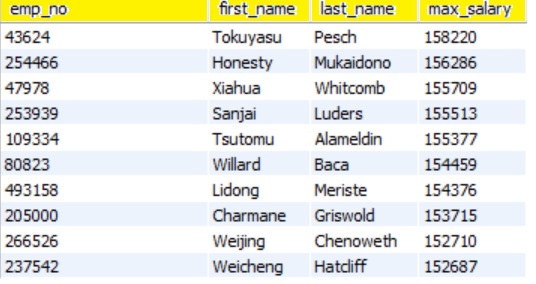
GROUP BY emp\_no) sal, employees

WHERE

employees.emp\_no = sal.emp\_no

ORDER BY max\_salary DESC

LIMIT 10;



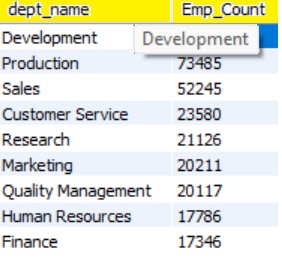
## Advanced Queries

### 3.1) Employee count by Department:

select distinct(departments.dept\_name), count(dept\_emp.emp\_no) as Emp\_Count from dept\_emp

inner join departments on departments.dept\_no = dept\_emp.dept\_no

group by departments.dept\_name order by Emp\_Count desc;



### 3.2) Salary Trend Over Time

SELECT YEAR (from\_date) start\_year, AVG (salary)

FROM salaries

GROUP BY YEAR (from\_date)

ORDER BY start\_year;



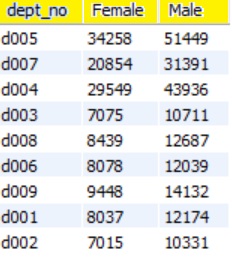
### 3.3) Gender Distribution by Department

select dept\_no, sum(gender = 'F') as Female,

sum(gender = 'M') as Male from employees

inner join dept\_emp on dept\_emp.emp\_no = employees.emp\_no

group by dept\_no;



#### 3.4) Average tenure of Employees by Department

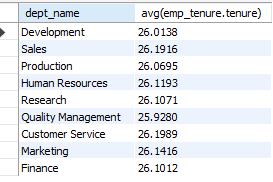
create table dept\_avg\_tenure as select departments.dept\_name, avg(emp\_tenure.tenure) from departments, emp\_tenure, dept\_emp

where

dept\_emp.emp\_no = emp\_tenure.emp\_no and

departments.dept\_no = dept\_emp.dept\_no

group by dept\_name;



#### 3.5) Average Salary of Employees in different departments by different titles

Create table dept\_title\_avg\_Sal as

select dept\_name, title, avg(salary)

from departments

inner join dept\_emp

using (dept\_no)

inner join salaries

using (emp\_no)

inner join titles

using (emp\_no)

group by dept\_name, title;