**SQL PORTFOLIO PROJECT**

**TESTING TABLEAU/ POWER BI REPORTS IN SQL**

**by Ekaterina Khamyshkeeva**

***Create Table:***

create table hrdata

(

emp\_no int8 PRIMARY KEY,

gender varchar(50) NOT NULL,

marital\_status varchar(50),

age\_band varchar(50),

age int8,

department varchar(50),

education varchar(50),

education\_field varchar(50),

job\_role varchar(50),

business\_travel varchar(50),

employee\_count int8,

attrition varchar(50),

attrition\_label varchar(50),

job\_satisfaction int8,

active\_employee int8

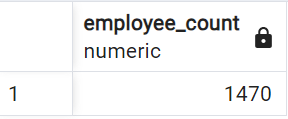
)

***Import Data in Table Using Query:***

COPY hrdata FROM 'C:\Users\тс\Desktop\Projects\Complete Project\SQL' DELIMITER ',' CSV HEADER;

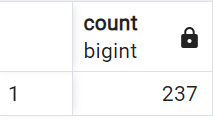
***Employee Count:***

select sum(employee\_count) as Employee\_Count from hrdata;



***Attrition Count:***

select count(attrition) from hrdata where attrition='Yes';



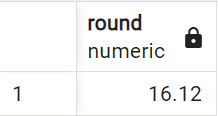
***Attrition Rate:***

select

round (((select count(attrition) from hrdata where attrition='Yes')/

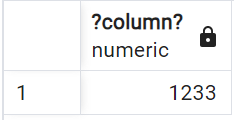
sum(employee\_count)) \* 100,2)

from hrdata;



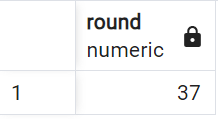
***Active Employees:***

select sum(employee\_count) - (select count(attrition) from hrdata where attrition='Yes') from hrdata;



***Average Age:***

select round(avg(age),0) from hrdata;



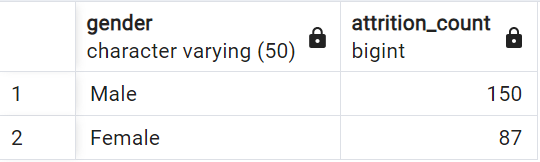
***Attrition by Gender:***

select gender, count(attrition) as attrition\_count from hrdata

where attrition='Yes'

group by gender

order by count(attrition) desc;



***Department Wise Attrition:***

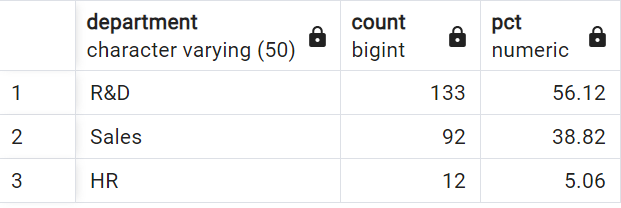
select department, count(attrition), round((cast (count(attrition) as numeric) /

(select count(attrition) from hrdata where attrition= 'Yes')) \* 100, 2) as pct from hrdata

where attrition='Yes'

group by department

order by count(attrition) desc;

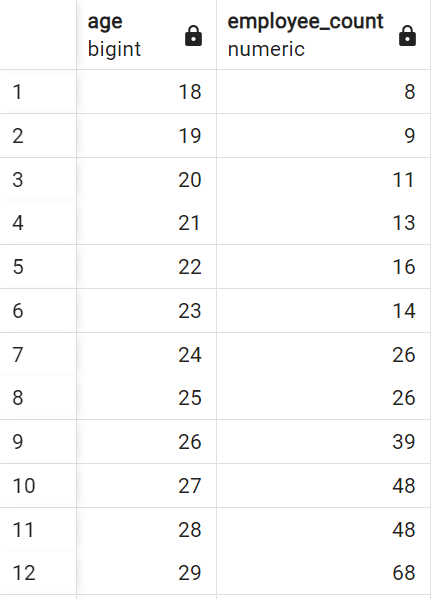


***No of Employees by Age Group:***

select age, sum(employee\_count) as employee\_count from hrdata

group by age

order by age;



...

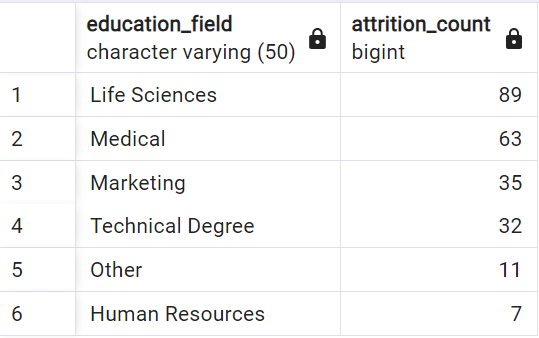
***Education Field Wise Attrition:***

select education\_field, count(attrition) as attrition\_count from hrdata

where attrition='Yes'

group by education\_field

order by count(attrition) desc;



***Attrition Rate by Gender for Different Age Groups:***

select age\_band, gender, count(attrition) as attrition,

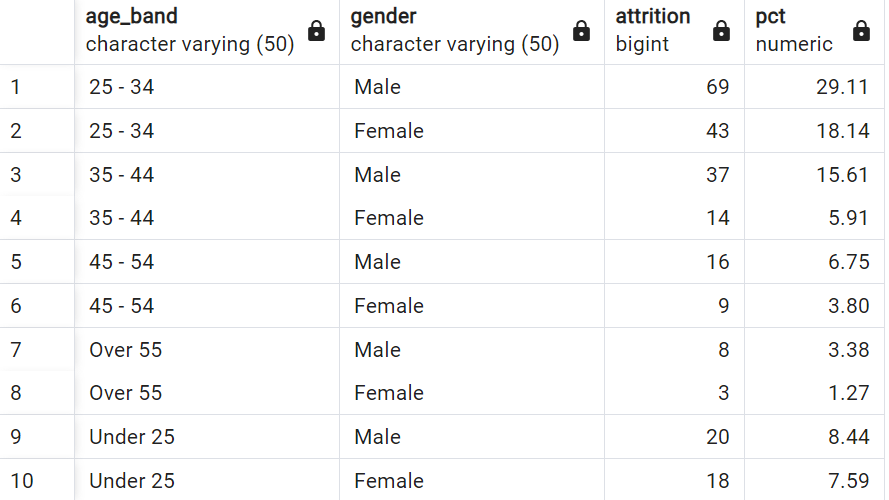
round((cast(count(attrition) as numeric) / (select count(attrition) from hrdata where attrition = 'Yes')) \* 100,2) as pct

from hrdata

where attrition = 'Yes'

group by age\_band, gender

order by age\_band, gender desc;



***Job Satisfaction Rating:***

- - Activating the cosstab() function

CREATE EXTENSION IF NOT EXISTS tablefunc;

- - Then

select \*

from crosstab(

'select job\_role, job\_satisfaction, sum(employee\_count)

from hrdata

group by job\_role, job\_satisfaction

order by job\_role, job\_satisfaction'

) as ct(job\_role varchar(50), one numeric, two numeric, three numeric, four numeric)

order by job\_role;

