**QUERIES FOR TESTING HR ANALYTICS DASHBOARD**

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

--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

select \* from hrdata

--Employee Count

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

--where education = 'High School'

--where department = 'R&D'

--Attrition Count

select count(attrition) from hrdata

where attrition='Yes' and department = 'R&D'

--Attrition Rate

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

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

from hrdata

--Active Employee

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 Employee 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 Group

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

--Run this query first to activate the cosstab() function in postgres

CREATE EXTENSION IF NOT EXISTS tablefunc;

--Then run this to get o/p-

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