DATA ANALYST PORTFOLIO SQL PROJECT

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 in Table Using Query

```
COPY hrdata FROM 'D:\hrdata.csv' 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 Employee:

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

OR

select (select sum(employee_count) from hrdata) - count(attrition) as active_employee from hrdata where attrition='Yes';

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 job_role,
    SUM(CASE WHEN job_statisfaction = 1 THEN employee_count
ELSE 0 END) AS '1',
    SUM(CASE WHEN job_statisfaction = 2 THEN employee_count
ELSE 0 END) AS '2',
    SUM(CASE WHEN job_statisfaction = 3 THEN employee_count
ELSE 0 END) AS '3',
    SUM(CASE WHEN job_statisfaction = 4 THEN employee_count
ELSE 0 END) AS '4'
FROM hrdata
GROUP BY job_role
ORDER BY job_role;
```