



HR Analytics Queries

Queries for charts in HR Analytics Dashboard
in Tableau

Document Credentials

Client Name	Eniolubi's Portfolio
Report Name	HR Analytics Dashboard (Tableau)
Development Tool	Tableau Desktop and PostgreSQL (pgAdmin 4)

Total Tests	11
Tests Passed	11
Tests Failed	0

Table Creation

Queries	
Create Table Query	<pre>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)</pre>
Insert Data Query	<pre>COPY hrdata FROM ' C:\~\hrdata.csv' DELIMITER ',' CSV HEADER;</pre>

KPI Sheet

Test No.	Sheet Name	Query	Test Result
1	Employee Count	<code>select count(1) as employee_count from hrdata;</code>	Pass
2	Attrition Count	<code>select count(1) as attrition_count from hrdata where attrition = 'Yes';</code>	Pass
3	Attrition Rate	<code>select round(((select count(1) from hrdata where attrition = 'Yes') / sum(employee_count)) * 100, 2) from hrdata;</code>	Pass
4	Active Employee	<code>select count(1) from hrdata where attrition = 'No';</code>	Pass
5	Average Age	<code>select round(((sum(age)) / sum(employee_count))) from hrdata;</code>	Pass

Query Sheet

Test No.	Sheet Name	Query	Test Result
6	Attrition by Gender	<pre>select gender, count(1) from hrdata where attrition = 'Yes' group by gender order by count(1) desc;</pre>	Pass
7	Department wise Attrition	<pre>select department, count(1) as department_attrition, round((cast(count(attrition) as numeric) / (select count(1) from hrdata where attrition = 'Yes')) * 100, 2) as percentage_attrition from hrdata where attrition = 'Yes' group by department order by count(1) desc;</pre>	Pass
8	No of Employee by Age Group	<pre>select age, sum(employee_count) as employee_count from hrdata group by age order by age asc;</pre>	Pass
9	Education Field wise Attrition	<pre>select education_field, count(attrition) from hrdata where attrition = 'Yes' group by education_field order by count(1) desc;</pre>	Pass

Query Sheet

Test No.	Sheet Name	Query	Test Results
10	Attrition Rate by Gender of different Age Group	<pre>select age_band, gender, count(attrition) as attrition, round((cast(count(attrition) as numeric) / (select count(1) from hrdata where attrition = 'Yes')) * 100, 2) as percentage_attrition from hrdata where attrition = 'Yes' group by age_band, gender order by age_band, gender desc;</pre>	Pass
11	Job Satisfaction Rating	<pre>select job_satisfaction, job_role, count(attrition) from hrdata group by job_role, job_satisfaction order by job_role, job_satisfaction asc;</pre> <p>Which can then be turned into:</p> <pre>CREATE EXTENSION IF NOT EXISTS tablefunc;</pre> <pre>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;</pre>	Pass