SQL QUERIES USED FOR TESTING POWER BI REPORT

CREATE TABLE:

```
CREATE TABLE EmployeeData
(       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:

```
COPY EmployeeData FROM ‘path/to/your/csv_file.csv' DELIMITER ’,' CSV HEADER;
```

SHOW ALL THE DATA OF THE TABLE:

```
SELECT* FROM EmployeeData;
```

KPI’s TESTING

EMPLOYEE COUNT:

```
select sum(employee_count) as Employee_Count from EmployeeData;
```

EMPLOYEE COUNT BY EDUCATION:

```
select sum(employee_count) as Employee_Count from EmployeeData where education =
'Bachelor''s Degree';
```

ATTRITION COUNT:

```
select count(attrition) from EmployeeData where attrition='Yes';
```

ATTRITION COUNT BY DEPARTMENT:

```
select count(attrition) from EmployeeData where attrition='Yes' and department='Sales';
```

ATTRITION RATE:

```
select
round (((select count(attrition) from EmployeeData where attrition='Yes')/
sum(employee_count)) * 100,2)
from EmployeeData;
```

ACTIVE EMPLOYEE:

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

MALE ACTIVE EMPLOYEE:

```
select (sum(employee_count) - (select count(attrition) from EmployeeData where
attrition='Yes' and gender='Male')) as active_employee from EmployeeData where
gender='Male' ;
```

AVERAGE AGE:

```
Select round(avg(age),0) from EmployeeData;
```

CHART'S TESTING:

ATTRITION BY GENDER:

```
select gender, count(attrition) as attrition_count from EmployeeData 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 EmployeeData where attrition= 'Yes')) * 100, 2) as percent from
EmployeeData
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 EmployeeData
GROUP BY age
order by age;
```

EDUCATION STREAM WISE ATTRITION:

```
select education_field, count(attrition) as attrition_count from EmployeeData
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 EmployeeData where
attrition = 'Yes')) * 100,2) as percent
from EmployeeData
where attrition = 'Yes'
group by age_band, gender
order by age_band, gender desc;
```

JOB SATISFACTION RATING:

```
SELECT *
FROM crosstab(
  'SELECT job_role, job_satisfaction, sum(employee_count)
   FROM EmployeeData
   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;
```