--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 attrition = 'Yes'

--WHERE department = 'Sales'

--Attrition count

SELECT COUNT(attrition) AS attrition\_count

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) AS attrition\_rate

FROM hrdata;

--Attrition rate for Sales

SELECT ROUND(((SELECT COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes' AND department = 'Sales')/ SUM(employee\_count)) \*100, 2)

FROM hrdata

WHERE department = 'Sales';

--Active employee

SELECT SUM(employee\_count)-(SELECT COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes')

FROM hrdata;

--Active Male employee

SELECT SUM(employee\_count)-(SELECT COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes' AND gender = 'Male')

FROM hrdata

WHERE gender = 'Male';

--Age

SELECT ROUND(AVG(age),0) AS avg\_age

FROM hrdata;

--Attrition by gender

SELECT gender, COUNT(attrition) AS attr\_co

FROM hrdata

WHERE attrition = 'Yes' --AND education = 'High School'

GROUP BY gender;

--Attrition by deparment

SELECT department, COUNT(attrition),

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY department;

--Attrition rate by department

SELECT department, COUNT(attrition),

ROUND((CAST(COUNT(attrition) AS numeric) / (SELECT COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes')) \* 100, 2)

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY department

ORDER BY COUNT(attrition) DESC;

--Number of employee by age group

SELECT age, SUM(employee\_count)

FROM hrdata

GROUP BY age

ORDER BY age ASC;

--Attriton in education

SELECT education, COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY education

ORDER BY COUNT(attrition) DESC;

--Attrition by age band and gender

SELECT age\_band, gender, COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY age\_band, gender

ORDER BY age\_band, gender DESC;

--Attrition rate by age band and gender

SELECT age\_band, gender, COUNT(attrition),

ROUND((CAST(COUNT(attrition) AS numeric)/ (SELECT COUNT(attrition)

FROM hrdata

WHERE attrition = 'Yes')) \* 100, 2)

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY age\_band, gender

ORDER BY age\_band, gender DESC;

--Job satisfaction by job role

CREATE EXTENSION IF NOT EXISTS tablefunc;

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 ASC;

--Employee count by age band and gender

SELECT age\_band, gender, SUM(employee\_count)

FROM hrdata

GROUP BY age\_band, gender

ORDER BY age\_band, gender DESC;