CREATE DATABASE hr1;

use hr1;

CREATE TABLE hrdata (

emp\_no INT PRIMARY KEY,

gender VARCHAR(50) NOT NULL,

marital\_status VARCHAR(50),

age\_band VARCHAR(50),

age INT,

department VARCHAR(50),

education VARCHAR(50),

education\_field VARCHAR(50),

job\_role VARCHAR(50),

business\_travel VARCHAR(50),

employee\_count INT,

attrition VARCHAR(50),

attrition\_label VARCHAR(50),

job\_satisfaction INT,

active\_employee INT

);

SELECT \* FROM hrdata;

-- Import Data in Table Using Query

-- COPY data FROM 'D:\Data Science\DBMS Project\HR Analyst\hrdata.csv' DELIMITER ',' CSV HEADER;

**-- Employee Count:**

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

-- where education = 'High School';

-- where department = 'Sales';

-- where department = 'R&D';

where education\_field = 'Medical';

**-- Attrition Count:**

select count(attrition) from hrdata

-- where attrition='Yes' and education = 'Doctoral Degree';

-- where attrition='Yes' and department = 'R&D' and education\_field = 'Medical';

where attrition='Yes' and department = 'R&D' and education\_field = 'Medical' and education = 'High School';

**-- Attrition Rate:**

select

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

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

from hrdata;

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;

select sum(employee\_count) - (select count(attrition) from hrdata where attrition='Yes'

and gender = 'Male') from hrdata

where gender = 'Male';

**-- Average Age:**

select round(avg(age),0) as Avg\_age from hrdata;

**-- Attrition by Gender**

select gender, count(attrition) as attrition\_count from hrdata

where attrition='Yes'

group by gender

order by count(attrition) asc;

select gender, count(attrition) as attrition\_count from hrdata

where attrition='Yes' and education='High School'

group by gender

order by count(attrition) asc;

**-- Department wise Attrition:**

SELECT department, COUNT(attrition) AS attrition\_count,

ROUND((COUNT(attrition) / (SELECT COUNT(attrition) FROM hrdata WHERE attrition = 'Yes')) \* 100, 2) AS pct

FROM hrdata

WHERE attrition = 'Yes'

GROUP BY department

ORDER BY attrition\_count DESC;

SELECT department, COUNT(attrition) AS attrition\_count,

ROUND((COUNT(attrition) / (SELECT COUNT(attrition) FROM hrdata WHERE attrition = 'Yes'and gender='Female')) \* 100, 2) AS pct

FROM hrdata

WHERE attrition = 'Yes' and gender='Female'

GROUP BY department

ORDER BY attrition\_count DESC;

**-- No of Employee by Age Group(Tableau)**

SELECT age, sum(employee\_count) AS employee\_count FROM hrdata

GROUP BY age

order by age;

-- No of Employee by Age Group(Power BI)

select age\_band, gender, sum(employee\_count) from hrdata

group by age\_band, gender

order by age\_band, gender desc;

**-- 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;

select education\_field, count(attrition) as attrition\_count from hrdata

where attrition='Yes' and department='Sales'

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((count(attrition) / (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**

SELECT

job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four

FROM hrdata

GROUP BY job\_role

ORDER BY job\_role;

**-- Job Satisfaction Rating Grand total wise**

SELECT

job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four,

SUM(employee\_count) AS `Grand Total`

FROM hrdata

GROUP BY job\_role

UNION ALL

SELECT

'Grand Total' AS job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four,

SUM(employee\_count) AS `Grand Total`

FROM hrdata

ORDER BY

CASE WHEN job\_role = 'Grand Total' THEN 1 ELSE 0 END,

job\_role;

**-- Job Satisfaction Rating for Gender = 'Female'**

SELECT

job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four

FROM hrdata

WHERE gender = 'female'

GROUP BY job\_role

ORDER BY job\_role;

**-- Job Satisfaction Rating Grand total wise Gender = 'Female'**

SELECT

job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four,

SUM(employee\_count) AS `Grand Total`

FROM hrdata

WHERE gender = 'female'

GROUP BY job\_role

UNION ALL

SELECT

'Grand Total' AS job\_role,

SUM(CASE WHEN job\_satisfaction = 1 THEN employee\_count ELSE 0 END) AS one,

SUM(CASE WHEN job\_satisfaction = 2 THEN employee\_count ELSE 0 END) AS two,

SUM(CASE WHEN job\_satisfaction = 3 THEN employee\_count ELSE 0 END) AS three,

SUM(CASE WHEN job\_satisfaction = 4 THEN employee\_count ELSE 0 END) AS four,

SUM(employee\_count) AS `Grand Total`

FROM hrdata

WHERE gender = 'female'

ORDER BY

CASE WHEN job\_role = 'Grand Total' THEN 1 ELSE 0 END,

job\_role;