**HR ANALYTICS SQL QUERIES**

**Creating a Database**

create database HR\_DB;

use HR\_DB;

**Overview of Dataset**

select \* from hr\_analytics;

**Data Cleaning and Processing**

alter table hr\_analytics

change column ï»¿EmpID EmpID varchar(20) null;

describe hr\_analytics;

-- **Remove Duplicate Employee ID**

set sql\_safe\_updates = 0;

create temporary table temp\_table as

select EmpID

from hr\_analytics

group by EmpID

having count(\*) > 1;

delete from hr\_analytics

where EmpID in (select EmpID from temp\_table);

drop temporary table if exists temp\_table;

-- **Replaced Values**

update hr\_analytics

set BusinessTravel = "Travel\_Rarely"

where BusinessTravel = "TravelRarely";

-- **Removed Columns**

alter table hr\_analytics

drop column YearsWithCurrManager;

**KPI’s**

-- **Count of Employee**

select count(distinct EmpID) as `Count of Employee`

from hr\_analytics;

-- **Attrition**

select count(Attrition) as `Attrition`

from hr\_analytics

where Attrition = "Yes";

-- **Attrition Rate**

select round(sum(case

when Attrition = "Yes"

then 1

else 0

End) / count(EmpID) \* 100, 2) as `Attrition Rate`

from hr\_analytics;

-- **Average Age**

select round(avg(Age), 2) as `Avg Age`

from hr\_analytics;

-- **Average Salary**

select round(avg(MonthlyIncome), 2) as `Avg Salary`

from hr\_analytics;

-- **Average Years**

select round(avg(YearsAtCompany), 2) as `Avg Years`

from hr\_analytics;

**Charts**

-- **Attrition by Gender**

select Gender, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by Gender;

-- **Attrition by Education**

select EducationField, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by EducationField

order by Attrition\_Count desc;

-- **Attrition by Age**

select AgeGroup, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by AgeGroup

order by Attrition\_Count desc;

-- **Attrition by Salary Slab**

select SalarySlab, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by SalarySlab

order by Attrition\_Count desc;

-- **Attrition by Job Role**

select JobRole, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by JobRole

order by Attrition\_Count desc

limit 5;

-- **Employee Attrition by Years at Company**

select YearsAtCompany, count(Attrition) as `Attrition\_Count`

from hr\_analytics

where Attrition = "Yes"

group by YearsAtCompany

order by Attrition\_Count desc;

-- **Job Role Satisfaction Comparison**

select JobRole,

sum(case when JobSatisfaction = 1 then 1 else 0 end) as `JobSatisfaction\_1`,

sum(case when JobSatisfaction = 2 then 1 else 0 end) as `JobSatisfaction\_2`,

sum(case when JobSatisfaction = 3 then 1 else 0 end) as `JobSatisfaction\_3`,

sum(case when JobSatisfaction = 4 then 1 else 0 end) as `JobSatisfaction\_4`,

count(Attrition) as `Total`

from hr\_analytics

where Attrition = 'Yes'

group by JobRole;