**-- QUESTIONS & ANSWER FROM - HR DATA TABLE**

-- 1.What is the gender break down of the employees in the company?

SELECT gender,count(\*)AS Count FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY gender;

-- 2.What is the race/ethnicity breakedown of employees in the company?

SELECT race,count(\*) AS Count FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY race

ORDER BY count(\*) DESC;

-- 3.What is the Age distribution of employees in the company?

SELECT min(Age) AS youngest, max(Age) AS Oldest FROM hr

WHERE Age >= 18 AND termdate = '';

-- We go futher to craete Age group for the Age,using the "CASE statement condition"

SELECT

CASE

WHEN Age >= 18 AND Age <= 24 THEN '18-24'

WHEN Age >= 25 AND Age <= 34 THEN '25-34'

WHEN Age >= 35 AND Age <= 44 THEN '35-44'

WHEN Age >= 45 AND Age <= 54 THEN '45-54'

WHEN Age >= 55 AND Age <= 64 THEN '55-64'

ELSE '65+'

END AS age\_group,

count(\*) AS count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY age\_group

ORDER BY age\_group;

-- Just to further know how the gender is distributed among the age\_age group

SELECT

CASE

WHEN Age >= 18 AND Age <= 24 THEN '18-24'

WHEN Age >= 25 AND Age <= 34 THEN '25-34'

WHEN Age >= 35 AND Age <= 44 THEN '35-44'

WHEN Age >= 45 AND Age <= 54 THEN '45-54'

WHEN Age >= 55 AND Age <= 64 THEN '55-64'

ELSE '65+'

END AS age\_group, gender,

count(\*) AS count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY age\_group, gender

ORDER BY age\_group, gender;

-- 4.How many employees work at headquarter versus remote location?

SELECT location, count(\*) AS Count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY location;

-- 5.What is the average length of employement for employees who have been terminated?

SELECT round(avg(datediff(termdate,hire\_date))/365,0) AS avg\_lenght\_of\_empl

FROM hr

WHERE termdate <=curdate() AND Age >=18;

-- 6.How does the gender distribution vary across department and job titles?

SELECT department,gender,count(\*) AS Count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY department,gender

ORDER BY department;

-- 7.What is the distribution of jobtitle across the company?

SELECT jobtitle,count(\*) AS count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY jobtitle

ORDER BY jobtitle DESC;

-- 8.Which departemt has the highest turn over?

-- NB: The term turnover rate here wiil mean the rate at which the employees leaves the company

-- ALSO NB: we are going to be making use of subquery here

SELECT department,

total\_count,terminated\_count,

terminated\_count/total\_count AS termination\_rate

FROM(

SELECT department,

count(\*) AS total\_count,

SUM( CASE WHEN termdate <> '' AND termdate <= curdate() THEN 1 ELSE 0 END) terminated\_count

FROM hr

WHERE age >= 18

GROUP BY department) AS subquery

ORDER BY termination\_rate DESC;

-- 9.what's the distribution of employees across locations by city and state?

SELECT location\_state,count(\*) AS count

FROM hr

WHERE Age >= 18 AND termdate = ''

GROUP BY location\_state

ORDER BY count DESC;

-- 10.How has the company employee's count changed over time based on the hire and term date?

SELECT

year,

hires,

terminations,

hires-terminations AS net\_change,

round( (hires-terminations)/hires\*100,2) AS net\_change\_percent

FROM(

SELECT

year(hire\_date) AS year,

count(\*) AS hires,

SUM(CASE WHEN termdate <> '' AND termdate <= curdate() THEN 1 ELSE 0 END) AS terminations

FROM hr

WHERE age > 18

GROUP BY YEAR(hire\_date)

) AS subquery

ORDER BY year ASC;

-- 11 What is the tenure distribution for each department?

SELECT department,

round(avg(datediff(termdate,hire\_date)/365),0) AS Avg\_tenure

FROM hr

WHERE termdate <= curdate() AND termdate <> '' AND termdate >= 18

GROUP BY department;