* **What is the gender breakdown of employee in the company ?**

SELECT gender, COUNT(\*) employee\_count

from hr

where termdate = ''

group by gender;

* What is the race/ethnicity breakdown of employees in the company ?

Select race, count(\*) as emp\_count from hr

Where termdate = ''

Group by race

order by emp\_count desc;

* What is the age distribution of employees in the company ?

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 emp\_count

FROM hr

WHERE termdate = '' AND age > 18

GROUP BY Age\_group,gender

order by Age\_group,gender;

* How many employees work at the headquarters versus remote locations ?

select location, count(\*) from hr

where termdate = ''

group by location;

* **What is the average length of the employment for the employees who have been terminated?**

SELECT

round(avg(datediff(termdate,hire\_date))/365,0) AS avg\_length\_employement\_in\_years

FROM hr

WHERE termdate <= curdate() AND termdate != '';

* How does the gender distribution vary across departments and job titles ?

SELECT department,gender,COUNT(\*) AS emp\_count

FROM hr

WHERE termdate = ''

GROUP BY department,gender

ORDER BY department;

* **What is the distribution of job titles across the company ?**

SELECT jobtitle, count(\*) AS emp\_count from hr

WHERE termdate = ''

GROUP BY jobtitle

ORDER BY jobtitle DESC;

* **Which department has the highest termination rate ?**

select department,

total\_count,

termination\_count,

termination\_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) as termination\_count

from hr

group by department) as subquery

order by termination\_rate desc

* **What is the distribution of employees across locations by city and state ?**

select location\_state as State,

location\_city as City, count(\*) as emp\_count

from hr

where termdate != ''

group by location\_state,location\_city

order by emp\_count desc;

* **How has the company’s employee count changed over time based on hire and termination dates ?**

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 termdate != ''

GROUP BY YEAR(hire\_date)

) AS subquery

ORDER BY year asc;

* **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 != ''

GROUP BY department;