**-- 03\_eda\_queries.sql**

**-- Purpose: Exploratory Data Analysis queries**

**USE layoffs\_project;**

**-- 1. Maximum layoffs**

SELECT MAX(total\_laid\_off) AS max\_laid\_off,

MAX(percentage\_laid\_off) AS max\_percentage

FROM layoffs\_staging2;

**-- 2. Companies with 100% layoffs**

SELECT \*

FROM layoffs\_staging2

WHERE percentage\_laid\_off = 1

ORDER BY total\_laid\_off DESC;

**-- 3. Total layoffs by company**

SELECT company,

SUM(total\_laid\_off) AS total\_laid\_off

FROM layoffs\_staging2

GROUP BY company

ORDER BY total\_laid\_off DESC;

**-- 4. Layoffs by country**

SELECT country,

SUM(total\_laid\_off) AS total\_laid\_off

FROM layoffs\_staging2

GROUP BY country

ORDER BY total\_laid\_off DESC;

**-- 5. Layoffs by year**

SELECT YEAR(date) AS year,

SUM(total\_laid\_off) AS total\_laid\_off

FROM layoffs\_staging2

GROUP BY YEAR(date)

ORDER BY year;

**-- 6. Layoffs by stage**

SELECT stage,

SUM(total\_laid\_off) AS total\_laid\_off

FROM layoffs\_staging2

GROUP BY stage

ORDER BY total\_laid\_off DESC;

**-- 7. Average percentage laid off by company**

SELECT company,

AVG(percentage\_laid\_off) AS avg\_percentage

FROM layoffs\_staging2

GROUP BY company

ORDER BY avg\_percentage DESC;

**-- 8. Rolling monthly layoffs**

WITH rolling\_total AS (

SELECT DATE\_FORMAT(date, '%Y-%m') AS month,

SUM(total\_laid\_off) AS total\_laid

FROM layoffs\_staging2

GROUP BY month

)

SELECT month,

total\_laid,

SUM(total\_laid) OVER (ORDER BY month) AS cumulative\_laid

FROM rolling\_total;

**-- 9. Top 5 companies by year**

WITH company\_year AS (

SELECT company,

YEAR(date) AS year,

SUM(total\_laid\_off) AS total\_laid\_off

FROM layoffs\_staging2

GROUP BY company, YEAR(date)

),

company\_year\_rank AS (

SELECT \*,

DENSE\_RANK() OVER (PARTITION BY year ORDER BY total\_laid\_off DESC) AS rank

FROM company\_year

)

SELECT \*

FROM company\_year\_rank

WHERE rank <= 5

ORDER BY year, rank;