SQL Queries for the TechLayoffs Analysis

This report presents a detailed SQL-based analysis of the massive wave of layoffs experienced across tech companies globally between 2022 and 2025(till now). The dataset used for this study is sourced from Layoffs.fyi, which tracks layoffs in the tech industry. The objective of the SQL analysis is to uncover patterns, trends, and sectoral impacts using structured queries on a relational database.

Table Used: Layoffs_Dataset

Key Columns:

- **company**: Name of the company
- **industry**: Industry sector
- **location, country**: Geographical location
- **date**: Date of the layoff
- **total_laid_off**: Number of employees laid off
- **percentage_laid_off**: Percent of workforce laid off
- **stage**: Funding or company stage (e.g., Seed, Series A)
- **funding**: Funding type/category
- **severity**: Qualitative impact rating

1. Preview of the Table Layoffs_Dataset

```sql
--- Basic Table View --
SELECT *
FROM Layoffs_Dataset
```

Results Messages

	Company	Location_HQ	Number_of_Layoff	Layoff_Date	Layoff_Percentage	Industry	Stage	Raised_Amount_mm	Country	Layoff_Month	Layoff_Year	Layoff_Quarter	Layoff_Severity	Funding_Category
1	Tract	London	100	2025-04-03	22	Real Estate	Unknown	180	United Kingdom	4	2025	2	Medium	Medium_funded
2	Automattic	SF Bay Area	281	2025-04-02	16	Other	Series E	986	United States	4	2025	2	Medium	high_funded
3	Canva	Sydney	10	2025-04-02	17	Consumer	Unknown	2500	Australia	4	2025	2	Low	high_funded
4	WhyHive	Melbourne	79	2025-04-02	100	Data	Seed	4	Australia	4	2025	2	Medium	low_funded
5	Northvolt	Stockholm	2800	2025-03-31	62	Energy	Unknown	13800	Sweden	3	2025	1	High	high_funded
6	2U	Washington D.C.	90	2025-03-31	20	Education	Post-IPO	426	United States	3	2025	1	Medium	high_funded
7	Palantir	Denver	120	2025-03-27	13.5	Data	Post-IPO	3000	United States	3	2025	1	Medium	high_funded
8	Block	SF Bay Area	931	2025-03-25	8	Finance	Post-IPO	150	United States	3	2025	1	High	Medium_funded
9	Niantic	SF Bay Area	68	2025-03-25	15	Other	Series D	770	United States	3	2025	1	Medium	high_funded
10	Prefect	Washington D.C.	20	2025-03-25	13.5	Data	Series B	47	United States	3	2025	1	Low	low_funded
11	Brightcove	Boston	198	2025-03-19	33	Marketing	Acquired	145	United States	3	2025	1	Medium	Medium_funded
12	Acxiom	Little Rock	130	2025-03-19	3	Marketing	Post-IPO	425.5	United States	3	2025	1	Medium	high_funded
13	HelloFresh	SF Bay Area	273	2025-03-17	20	Food	Post-IPO	367	United States	3	2025	1	Medium	high_funded
14	Otorio	Tel Aviv	45	2025-03-17	56	Security	Acquired	80	Israel	3	2025	1	Low	Medium_funded
15	ActiveFe...	New York City	22	2025-03-13	7	Security	Series B	100	United States	3	2025	1	Low	Medium_funded
16	D-ID	Tel Aviv	22	2025-03-10	25	AI	Series B	48	Israel	3	2025	1	Low	low_funded
17	Arrival	London	120	2025-03-10	100	Transport...	Post-IPO	629	United Kingdom	3	2025	1	Medium	high_funded

2. Total Number of rows in the table

```sql
-- Total Row Count
SELECT COUNT(*) AS Total_Rows
FROM Layoffs_Dataset;
```

Results Messages

	Total_Rows
1	4024

Insight: There were total 4024 rows in the dataset.

3. **Top five rows of the tables**

```
-- Top 5 rows of the table
SELECT TOP 5 *
FROM Layoffs_Dataset
```

Results Messages

	Company	Location_HQ	Number_of_Layoff	Layoff_Date	Layoff_Percentage	Industry	Stage	Raised_Amount_mm	Country	Layoff_Month	Layoff_Year	Layoff_Quarter	Layoff_Severity	Funding_Category
1	Tract	London	100	2025-04-03	22	Real Estate	Unknown	180	United Kingdom	4	2025	2	Medium	Medium_funded
2	Automattic	SF Bay Area	281	2025-04-02	16	Other	Series E	986	United States	4	2025	2	Medium	high_funded
3	Canva	Sydney	10	2025-04-02	17	Consumer	Unknown	2500	Australia	4	2025	2	Low	high_funded
4	WhyHive	Melbourne	79	2025-04-02	100	Data	Seed	4	Australia	4	2025	2	Medium	low_funded
5	Northvolt	Stockholm	2800	2025-03-31	62	Energy	Unknown	13800	Sweden	3	2025	1	High	high_funded

Insight: Top 5 rows view of the dataset

4. **Total Layoffs**

```
-- Total Layoffs since 2020
SELECT SUM([Number_of_Layoff]) AS Total_layoffs FROM Layoffs_Dataset;
```

Results Messages

	Total_layoffs
1	832349

Insights: There were total 832349 layoffs occurred during year 2020 – 2025 till now.

5. **Total Layoff by year**

```
SELECT Layoff_Year, SUM([Number_of_Layoff]) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Layoff_Year
ORDER BY Total_Layoffs DESC
```

Results Messages

	Layoff_Year	Total_Layoffs
1	2023	312980
2	2022	200442
3	2024	175859
4	2020	95351
5	2025	30845
6	2021	16872

Insights: Highest layoff was happened in the year 2023 followed by year 2022.

6. **Total Layoff by Industry**

```sql
-- Layoffs by industry

SELECT Industry, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Industry
ORDER BY Total_Layoffs DESC
```

Results | Messages

	Industry	Total_Layoffs
1	Retail	84171
2	Consumer	83706
3	Other	74341
4	Transportation	72168
5	Hardware	65428
6	Finance	63483
7	Food	59748
8	Healthcare	48155
9	Travel	27617
10	Real Estate	26846
11	Education	24611
12	Infrastructure	22774
13	Crypto	18906
14	Sales	17146
15	Marketing	16930
16	Data	14743
17	HR	14492
18	Security	14025
19	Media	13091
20	Energy	12428
21	Fitness	11596
22	Support	9278
23	Manufacturing	8246
24	Logistics	7064
25	Recruiting	6489
26	Construction	5628
27	Aerospace	4372
28	Product	2756
29	Legal	1581
30	AI	495
31	Unknown	35

Insights: The most layoff was heppend in the Retail and the cosumer sector.

7. **Top 10 Companies with Most Layoffs**

```
SELECT TOP 10 Company, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Company
ORDER BY Total_Layoffs DESC
```

100 %

Results | Messages

	Company	Total_Layoffs
1	Amazon	28340
2	Meta	24900
3	Intel	16115
4	Microsoft	15208
5	Tesla	14620
6	Cisco	14300
7	Google	14072
8	Dell	13250
9	Salesforce	12140
10	SAP	11000

Insight: The most layoff happened in the Amazon compny followed by Meta since 2020 – 2025(till now). Major tech giants accounted for a significant portion of layoffs.

8. **Top 10 Countries with highest layoffs**

```
SELECT Top 10 Country, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Country
ORDER BY Total_Layoffs DESC
```

100 %

Results | Messages

	Country	Total_Layoffs
1	United States	562863
2	India	63360
3	Germany	33858
4	United Kingdom	25722
5	Netherlands	19872
6	Sweden	18945
7	Canada	16386
8	Brazil	12340
9	China	10622
10	Israel	10553

Insight: The United States has highest number of layoff followed by the India and Germany.

9. **Layoff by Quarter**

```
SELECT  Layoff_Quarter, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY  Layoff_Quarter
ORDER BY  Total_Layoffs DESC
```

	Layoff_Quarter	Total_Layoffs
1	1	313238
2	2	217679
3	4	158479
4	3	142953

Insights: Among all the quarter's first quarter has highest layoff followed by the second and fourth quarter.

10. **Severity Categories Distribution**

```
SELECT Layoff_Severity, COUNT(*) AS Count
FROM Layoffs_Dataset
GROUP BY Layoff_Severity;
```

Results Messages

	Layoff_Severity	Count
1	High	228
2	Low	966
3	Medium	2830

Insight: The most number of the layoff was under Medium severity followed by low and high.

11. **Layoffs vs. Funding Category**

```
SELECT Funding_Category, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Funding_Category
ORDER BY Total_Layoffs DESC;
```

Results Messages

	Funding_Category	Total_Layoffs
1	high_funded	448393
2	Medium_funded	235359
3	low_funded	148597

Insight: The most number of layoff happened in the high funded compnies followed by the mid level and low funded compnies.

12. **Funding Stage-wise Layoff Analysis**

```sql
SELECT Stage, SUM(Number_of_Layoff) AS Total_Layoffs
FROM Layoffs_Dataset
GROUP BY Stage
ORDER BY Total_Layoffs DESC;
```

Results | Messages

	Stage	Total_Layoffs
1	Post-IPO	421529
2	Unknown	99543
3	Acquired	77582
4	Series B	44460
5	Series C	39770
6	Series D	34604
7	Series E	28115
8	Series A	18169
9	Series F	16165
10	Private Equity	13855
11	Seed	9634
12	Series H	8815
13	Subsidiary	8011
14	Series G	4998
15	Series J	3874
16	Series I	3225

Insights: Post-IPO compnies has the most layoff followed by the stealth mode and acquired compnies.

13. **Year-on-Year % Increase in Layoffs**

```sql
WITH Yearly AS (
  SELECT Layoff_Year, SUM(Number_of_Layoff) AS Total_Layoffs
  FROM Layoffs_Dataset
  GROUP BY Layoff_Year
)
SELECT
  A.Layoff_Year,
  A.Total_Layoffs,
  ((A.Total_Layoffs - B.Total_Layoffs) * 100.0 / B.Total_Layoffs) AS YoY_Change_Percent
FROM Yearly A
JOIN Yearly B ON A.Layoff_Year = B.Layoff_Year + 1;
```

100 %

Results | Messages

	Layoff_Year	Total_Layoffs	YoY_Change_Percent
1	2025	30845	-82.460380190948
2	2022	200442	1088.015647226173
3	2023	312980	56.144919727402
4	2021	16872	-82.305376975595
5	2024	175859	-43.811425650201