--1) Previewing Google’s public DEI dataset.

/\* This query previews the first 10 rows of Google's public DEI dataset to explore workforce diversity data structure. \*/

SELECT

\*

FROM

`bigquery-public-data.google\_dei.full\_csv-latest-data-is-2023`

limit 10;

--------------------------------------------------------------------------------------------------------------------------------------

--2) Analyzing post-2020 workforce diversity trends across sectors using row-level year rankings from Google’s public DEI dataset.

/\*

This SQL query analyzes workforce diversity data from Google’s public DEI dataset, focusing on the years after 2020.

It uses a Common Table Expression (CTE) to:

Filter records where year > 2020

and then:

Ranks industries within each sector and year by total employment using Google’s DEI dataset. It highlights the most employed industries per group and prepares the data for deeper diversity and trend analysis.

\*/

WITH full\_data\_filtered AS (

SELECT \*

FROM `bigquery-public-data.google\_dei.full\_csv-latest-data-is-2023`

WHERE year > 2020

)

SELECT

year

,ROW\_NUMBER() OVER (PARTITION BY sector,year ORDER BY total\_employed\_in\_thousands DESC) AS employment\_rank\_within\_sector\_year

,sector

,subsector

,industry\_group

,industry

,total\_employed\_in\_thousands

,percent\_women

,percent\_white

,percent\_black\_or\_african\_american

,percent\_asian

,percent\_hispanic\_or\_latino

FROM full\_data\_filtered;

--------------------------------------------------------------------------------------------------------------------------------------

--3) Change in % of women from 2021 to 2023

/\* This query shows the growth or decline in women’s representation across sectors. \*/

WITH sector\_year\_stats AS (

SELECT

sector,

year,

ROUND(AVG(percent\_women), 2) AS avg\_percent\_women

FROM `bigquery-public-data.google\_dei.full\_csv-latest-data-is-2023`

WHERE year IN (2021, 2023)

GROUP BY sector, year

)

SELECT

s1.sector,

s1.avg\_percent\_women AS percent\_women\_2021,

s2.avg\_percent\_women AS percent\_women\_2023,

ROUND(s2.avg\_percent\_women - s1.avg\_percent\_women, 2) AS change\_in\_percent

FROM sector\_year\_stats s1

JOIN sector\_year\_stats s2

ON s1.sector = s2.sector

WHERE s1.year = 2021 AND s2.year = 2023

ORDER BY change\_in\_percent DESC;