PROJECT: ANALYZING UNICORN COMPANIES





Did you know that the average return from investing in stocks is 10% per year (not accounting for inflation)? But who wants to be average?!

You have been asked to support an investment firm by analyzing trends in high-growth companies. They are interested in understanding which industries are producing the highest valuations and the rate at which new high-value companies are emerging. Providing them with this information gives them a competitive insight as to industry trends and how they should structure their portfolio looking forward.

You have been given access to their unicorns database, which contains the following tables:

dates

Column	Description	
company_id	A unique ID for the company.	
date_joined	The date that the company became a unicorn.	
year_founded	The year that the company was founded.	

funding

Column	Description
company_id	A unique ID for the company.
valuation	Company value in US dollars.
funding	The amount of funding raised in US dollars.
select_investors	A list of key investors in the company.

industries

Column	Description	
company_id	A unique ID for the company.	
industry	The industry that the company operates in.	

companies

Column	Description		
company_id	A unique ID for the company.		
company	The name of the company.		
city	The city where the company is headquartered.		
country	The country where the company is headquartered.		
continent	The continent where the company is headquartered.		

The output

Your query should return a table in the following format:

industry	year	num_unicorns	average_valuation_billions
industry1	2021		
industry2	2020		
industry3	2019		
industry1	2021		
industry2	2020		
industry3	2019		
industry1	2021		
industry2	2020		
industry3	2019		

Where industry1, industry2, and industry3 are the three top-performing industries.

```
Projects Data DataFrame as df1
WITH ranked_unicorns AS (
SELECT
    i.industry,
    EXTRACT('year' FROM d.date_joined) AS year,
    COUNT(*) AS num_unicorns,
    ROUND(AVG(f.valuation)/1000000000, 2) AS average_valuation_billions,
    RANK() OVER (PARTITION BY EXTRACT('year' FROM d.date_joined) ORDER by
COUNT(*) DESC)
FROM dates d
JOIN funding f USING (company_id)
JOIN industries i USING (company_id)
WHERE EXTRACT('year' FROM d.date_joined) IN ('2019', '2020', '2021')
GROUP BY
    i.industry,
    EXTRACT('year' FROM d.date_joined)
)
SELECT
    industry,
    year,
    num_unicorns,
    average_valuation_billions
FROM ranked_unicorns
WHERE rank <= 3
ORDER BY
   year DESC,
    num_unicorns DESC
             ↑ industry
index
              0 Fintech
              1 Internet software & services
              2
                 E-commerce & direct-to-consumer
              3 Internet software & services
                 E-commerce & direct-to-consumer
              5 Fintech
              6 Fintech
              7
                 Artificial intelligence
                 Internet software & services
              8
Rows: 9
                                                                            Expand
```