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.

```
WITH top_in AS(
	SELECT industry,
			COUNT(i.*) AS count
	FROM industries AS i
	LEFT JOIN dates AS d
		ON i.company_id = d.company_id
	WHERE EXTRACT(year FROM d.date_joined) IN ('2019','2020','2021')
	GROUP BY industry
	ORDER BY count DESC
	LIMIT 3),

	rankings AS (
	SELECT COUNT(i.*) AS num_unicorns,
			industry,
			EXTRACT(year FROM date_joined) AS year,
			AVG(f.valuation) AS average_valuation
	FROM industries AS i
	LEFT JOIN funding AS f
		ON i.company_id = f.company_id
	LEFT JOIN dates AS d
		ON i.company_id = d.company_id
	GROUP BY industry, year)

SELECT industry,
		year,
		num_unicorns,
		ROUND(AVG(average_valuation/1000000000),2) AS
average_valuation_billions
FROM rankings
WHERE year IN (2019,2020,2021)
	AND industry in (SELECT industry
				FROM top_in)
GROUP BY industry, num_unicorns, year
ORDER BY year DESC, num_unicorns DESC;
```

Out[1]:

	industry	year	num_unicorns	average_valuation_billions
0	Fintech	2021	138	2.75
1	Internet software & services	2021	119	2.15
2	E-commerce & direct-to-consumer	2021	47	2.47
3	Internet software & services	2020	20	4.35
4	E-commerce & direct-to-consumer	2020	16	4.00
5	Fintech	2020	15	4.33
6	Fintech	2019	20	6.80
7	Internet software & services	2019	13	4.23
8	E-commerce & direct-to-consumer	2019	12	2.58