PROJECT: UNCOVERING THE WORLD'S OLDEST BUSINESSES

Staffelter Hof Winery is Germany's oldest business, established in 862 under the Carolingian dynasty. It has continued to serve customers through dramatic changes in Europe, such as the Holy Roman Empire, the Ottoman Empire, and both world wars. What characteristics enable a business to stand the test of time?

To help answer this question, BusinessFinancing.co.uk researched the oldest company still in business in **almost** every country and compiled the results into several CSV files. This dataset has been cleaned.

Having useful information in different files is a common problem. While it's better to keep different types of data separate for data storage, you'll want all the data in one place for analysis. You'll use joining and data manipulation to work with this data and better understand the world's oldest businesses.

The Data

`businesses` and `new_businesses`

Column	Description
`business`	Name of the business (varchar)
`year_founded`	Year the business was founded (int)
`category_code`	Code for the business category (varchar)
`country_code`	ISO 3166-1 three-letter country code (char)

`countries`

Column	Description
`country_code`	ISO 3166-1 three-letter country code (varchar)
`country`	Name of the country (varchar)
`continent`	Name of the continent the country exists in (varchar)

`categories`

Column	Description
`category_code`	Code for the business category (varchar)
`category`	Description of the business category (varchar)

Projects Data DataFrame as `oldest_business_continent`

```
-- What is the oldest business on each continent?
with groupings as (
select continent,
    country,
    business,
    year_founded,
    row_number() over (partition by continent order by year_founded asc) as rankings
from businesses as b
left join countries as c
    on b.country_code = c.country_code)

select continent,
    country,
    business,
    year_founded
from groupings
where rankings = 1;
```

index	continent	country	business	year_founded
0	Africa	Mauritius	Mauritius Post	
1	Asia	Japan	Kongō Gumi	
2	Europe	Austria	St. Peter Stifts Kulinarium	
3	North America	Mexico	La Casa de Moneda de México	
4	Oceania	Australia	Australia Post	
5	South America	Peru	Casa Nacional de Moneda	

Rows: 6 Expand

Projects Data DataFrame as `count_missing`

```
-- How many countries per continent lack data on the oldest businesses
SELECT c.continent, COUNT(c.country_code) AS countries_without_businesses
FROM countries c
LEFT JOIN (
    SELECT * FROM businesses
    UNION ALL
    SELECT * FROM new_businesses
) as b
ON c.country_code = b.country_code
WHERE b.business IS NULL
GROUP BY c.continent;

-- Does including the `new_businesses` data change this?
```

index	continent	countries_without_businesses
0	Africa	
1	Asia	
2	Europe	
3	North America	
4	Oceania	
5	South America	

Rows: 6 Expand

Projects Data DataFrame as `oldest_by_continent_`

```
-- Which business categories are best suited to last over the course of centuries?
with groupings as (
    select
    continent,
    category,
    year_founded,
    row_number () over (partition by category, continent order by year_founded asc) as rankings
from businesses as b
inner join countries as c
    on b.country_code = c.country_code
inner join categories as ca
    on b.category_code = ca.category_code
    )
select
    continent,
    category,
    min(year_founded) as year_founded
from groupings
    where rankings = 1
    group by continent, category
    order by year_founded asc;
```

	contin…	category	year…
0	Asia	Construction	578
1	Europe	Cafés, Restaurants & Bars	803
2	Europe	Distillers, Vintners, & Breweries	862
3	Europe	Manufacturing & Production	864
4	Asia	Cafés, Restaurants & Bars	1153
5	Europe	Agriculture	1218
6	Europe	Tourism & Hotels	1230
7	Europe	Mining	1248
8	Europe	Medical	1422
9	Europe	Postal Service	1520
10	North America	Manufacturing & Production	1534
11	South America	Banking & Finance	1565
12	Asia	Tourism & Hotels	1584
13	Europe	Banking & Finance	1606
14	South America	Manufacturing & Production	1621
15	North America	Agriculture	1638

Rows: 56 Expand