Dunder Mifflin Policies By Partners

Context

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/*
Pretending I am a Data Analyst at Dunder Mifflin.
Michael Scott wants to know who our most popular partner is.

To achieve this I would look at policy count by partner as a way to prove x partner is our most popular partner.
I will need to find a table that has policy records, another table with partner profiles, and some kind of sales records.
As i go dig for data I need to keep in mind some partners have multiple represenations in multiple regions due to expansion and mergers.
What i mean is they might have children partners and each child partner has its own partner code apart from the parent partner code.
Anyways, I found the tables and plan on querying policy count (in aggregated form) and sort by most to least in association with the partner codes.

    There are four tables
    table name              alias       contents
    --------------------------------------------------------------------------------
    partner lookup          plu         partner codes, partner names, and partner business sector (i.e. law, education, energy, etc.)
    policy option           po          policy detail
    policy                  p           product focused and contains customers' profiles w payment info and product info
    schedule                s           Jim/Dwight's team own this table which entails contract details that can be linked to customers

Dunder Mifflin is a thriving paper company and has accumulated many partners and policies over the years.
Jim is kind enough to help me narrow down the partners by telling me that their top partner is called 'Vance Refrigeration'.
So far he has no evidence other than by experience as a salesman.
Well there is a table called 'Partner Lookup' in the database located at this schema --> DM.PARTNERLOOKUP.
The table contains details such as the partner codes, partner names, and partner business sector (i.e. law, education, energy, etc.)
In the DM.PARTNERLOOKUP I filter the partner columm to 'Vance Refigeration', the associating partner codes are 'JDF', 'JX', and 'J5' and the business sector is coded as 'energy'.
That is very helpful as I make a mental note to look at policies that at least contain those partner codes.

Some accronyms worth mentioning:
    DM = Dunder Mifflin
    SPA = Scanton PA
    POLREF = policy reference
    SCHEDREF = schedule reference
    POLSTATUS = policy status


Overlaps observed amongst the three tables: policy option, policy, and schedule
- policy option and policy share POLREF
- schedule and policy share SCHEDREF

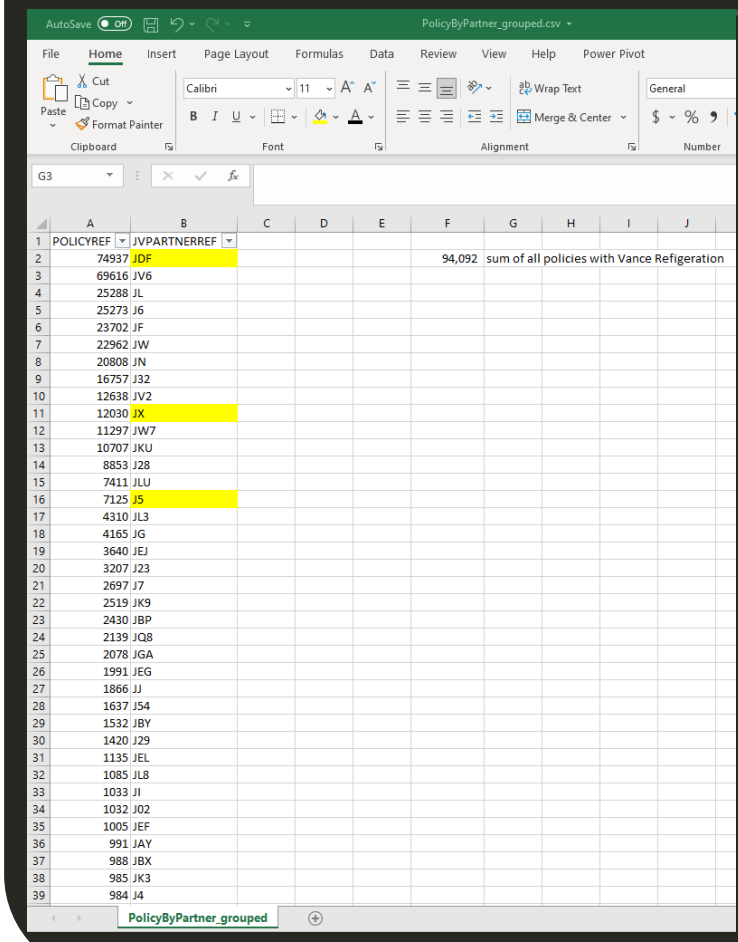
The reason i'm not joining the partner lookup table to the three tables listed above is because multiple joins can get messy.
So i capped the joins to three tables and just bared in mind the relevant partner codes to be on the look out for.

*/
```

SQL script

```sql
select
COUNT (po.POLREF) AS PolicyRef -- column 1 aggregated policies
,s.PARTNERCODE -- column 2 partner codes
FROM DM.SPA_POLICYOPTION po -- let the policy option table be the driving table
JOIN DM.SPA_POLICY p ON (po.POLREF = p.POLREF) -- join policy table to policy option table on the shared column 'polref'
JOIN SALES.SCHEDULE s ON (s.SCHEDREF = p.SCHEDREF) -- join the schedule table to the policy table on the shared column 'schedref'
where fromdate <= trunc(sysdate) -- filtering the date to to speed up the query
AND ((todate is null) or (todate >= sysdate ))
AND p.POLSTATUS in ('c','g','q','C','G','Q') -- filtering the policy status column to codes that mean "active"
AND s.PARTNERCODE LIKE 'J%' -- to be extra safe, showing all policies that have partner codes that begin with a 'J'
GROUP BY s.PARTNERCODE -- grouped the results by partner codes
ORDER BY COUNT(po.POLREF) DESC; -- order by most to least
```

Result



	POLICYREF	JVPARTNERREF								
1										
2	74937	JDF				94,092	sum of all policies with Vance Refigeration			
3	69616	JV6								
4	25288	JL								
5	25273	J6								
6	23702	JF								
7	22962	JW								
8	20808	JN								
9	16757	J32								
10	12638	JV2								
11	12030	JX								
12	11297	JW7								
13	10707	JKU								
14	8853	J28								
15	7411	JLU								
16	7125	J5								
17	4310	JL3								
18	4165	JG								
19	3640	JEJ								
20	3207	J23								
21	2697	J7								
22	2519	JK9								
23	2430	JBP								
24	2139	JQ8								
25	2078	JGA								
26	1991	JEG								
27	1866	JJ								
28	1637	J54								
29	1532	JBY								
30	1420	J29								
31	1135	JEL								
32	1085	JL8								
33	1033	JI								
34	1032	J02								
35	1005	JEF								
36	991	JAY								
37	988	JBX								
38	985	JK3								
39	984	J4								

Left: the SQL query output in the form of a csv file. The file shows two columns- aggregate policy count and grouped by partner codes.

Above: The sum of the policies with the highlighted partner codes as they are associated with Vance Refrigeration.