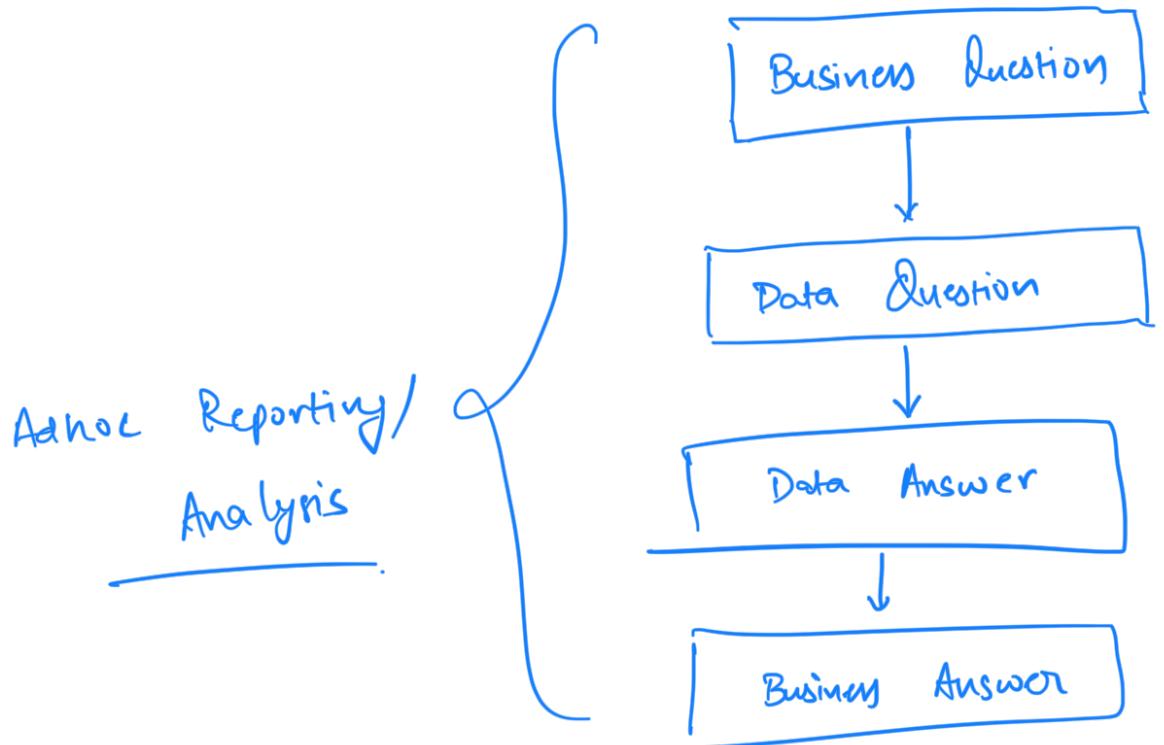


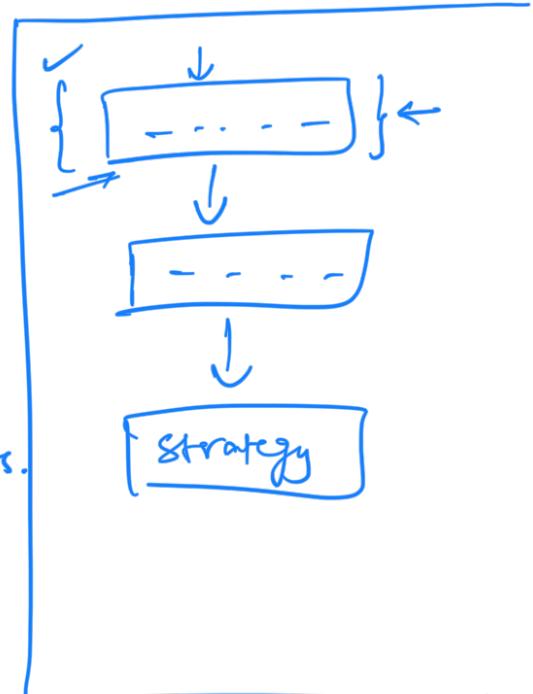
CTEs + Problem Solving



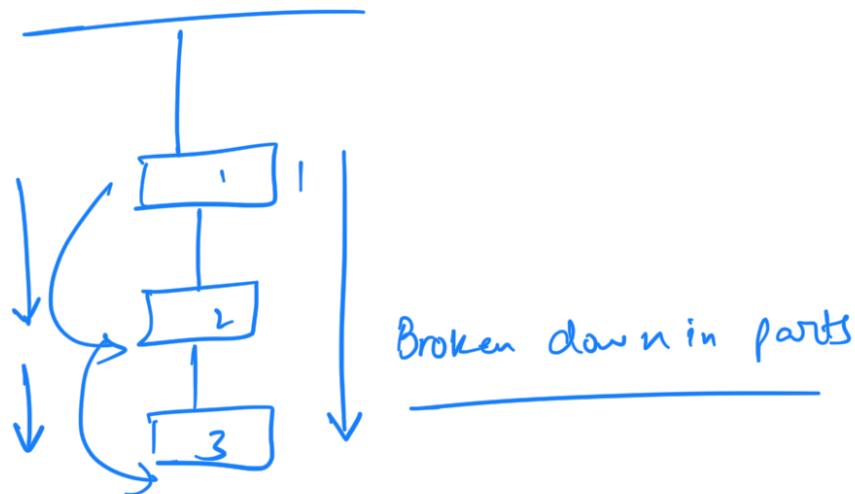
Manager → Last week sales?? → Any.

Custom Datasets

Goal: Dataset to have one row per date & vendor, we don't need to include detailed info about the customer or products.



Problem



Common Table Expressions (CTE)

Syntax:

```

WITH [query-alias1] AS (
    [query1]
),
[query-alias-2] AS (
    [query2]
),
:
[queryalias-n] AS (
    [queryn]
)

```

SELECT

FROM = CTE

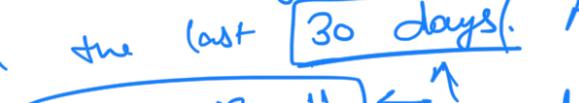
© 2008 by Walter R. Salter

Q: Weekly memo

Facebook Interview Q.

Fb-Comments - cont

User-id	Date	num-commits
1 1	21 22	10 11 12 9 1 1 10 26 30
		4

Q: Return the total number of comments received for each user in the last 30 days. Assume that today is 2023-03-11. 

Step 1: Filter the data for the last 30 days

Step 2: Aggregate the no of comments per user.

FBC ←

user_id	created_at	num_comments
---------	------------	--------------

→ country (Active) ←

Q: Which countries have risen in the rankings between based on the number of comments Dec 2021 vs Jan 2022?

Step1: Join
 Step2: Dec 21, Jan 21 → CTE ?

Step3: Aggregation: total number of comments per country.

Step4: Ranking.

jan < dec

Country	Ranking	no. of co.
India	1	
US	3	
Aus	2	
NULL		
NULL		

2 < 3

Country	jan-rank
India	1 ✓(R)
US	2
Aus	3
Nigeria	
Chile	

d-country	j-country
India	India
US	US
Aus	Aus
NULL	Nigeria
NULL	Chile

