

Day57 - April 2nd 2024

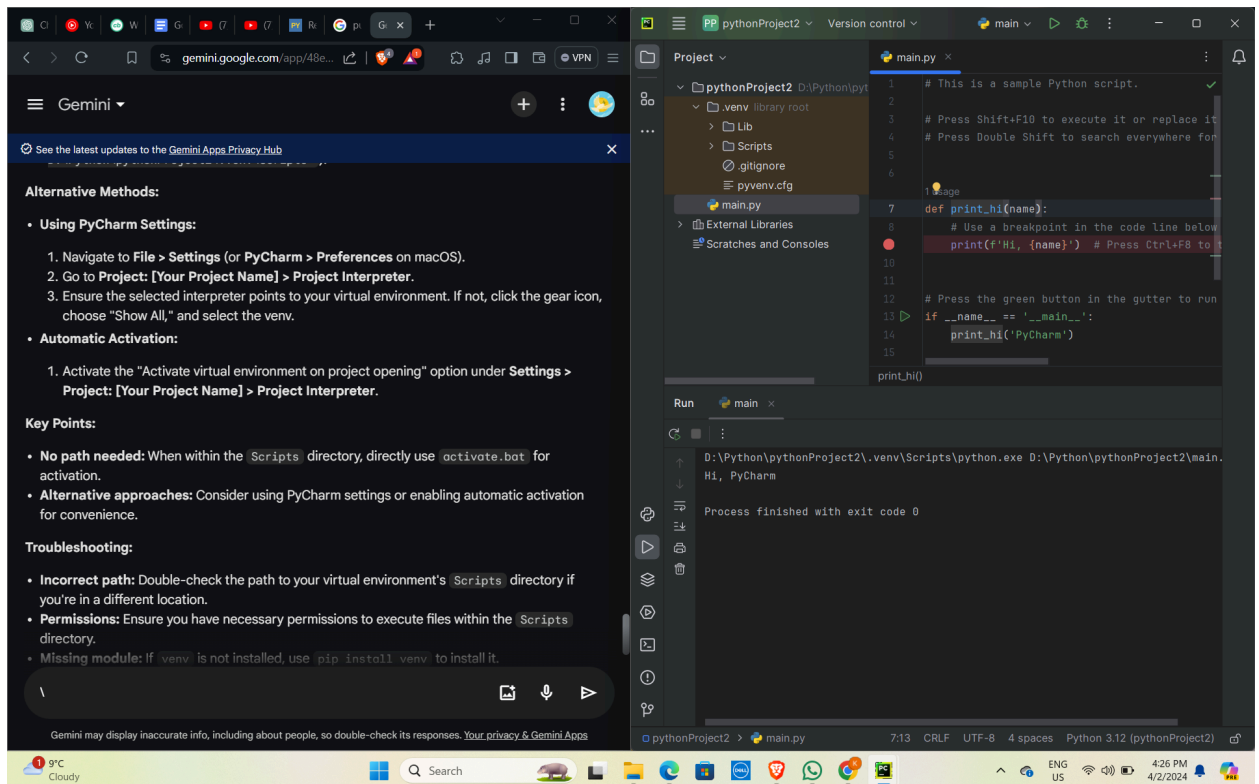
1. Started my day as usual
2. Solved Dutch National Flag problem on leetcode

Find my approach and Solution :

<https://docs.google.com/document/d/1O15xn2hq8v8uSSmtB6EV-9pVADwCibt7mHwlhq1i4UY/edit?usp=sharing>

3. Completed Learning data modeling and made a short revision of what I've learned today
4. Implemented a data engineering project

Find the doc here : [Real Time Data Streaming 4-2-24](#)



5.

6. Ended my day by solving complex SQL from Youtube

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
SQLQuery1.sql - K:\KAUSHI\jamka (63) ->
--Q : Find top 2 products in the top 2 categories based on spend amount?
select * from orders;
```

The Results pane displays the following data:

	category	product	user_id	spend	transaction_date
1	appliance	refrigerator	165	246	2021-12-26
2	appliance	refrigerator	123	299	2022-03-02
3	appliance	washingmachine	123	219	2022-03-02
4	electronics	vacuum	178	152	2022-04-05
5	electronics	wirelessheadset	156	249	2022-07-08
6	electronics	TV	145	189	2022-07-15
7	Television	TV	165	129	2022-07-15
8	Television	TV	163	129	2022-07-15
9	Television	TV	141	129	2022-07-15
10	toys	Ben10	145	189	2022-07-15
11	toys	Ben10	145	189	2022-07-15
12	toys	yoyo	165	129	2022-07-15
13	toys	yoyo	163	129	2022-07-15
14	toys	yoyo	141	129	2022-07-15
15	toys	yoyo	145	189	2022-07-15
16	electronics	vacuum	145	189	2022-07-15

Query executed successfully.

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
SQLQuery1.sql - K:\KAUSHI\jamka (63) ->
with cte as(
select *,sum(spend) over(partition by category order by category) as run_sum from orders)
,cte2 as(
select *,dense_rank() over(order by run_sum desc) as rn from cte)
,cte3 as(
select category,product,sum(spend) as product_sum from cte2
where rn < 3
group by category,product),
cte4 as(
select *,rank() over(partition by category order by product_sum desc) as rn from cte3)
select category,product from cte4
where rn < 3
order by product_sum desc
```

The Results pane displays the following data:

	category	product
1	toys	yoyo
2	toys	Ben10
3	electronics	vacuum
4	electronics	wirelessheadset

Query executed successfully.