

Prompts and Ideology(Use of ChatGPT and copilot)

Can do with cursor to but out of free use

1.

I want to create this:

Write a prompt to generate synthetic e-commerce data (around 5 files).

Write a prompt to ingest that generated data into a SQLite database.

Write an SQL prompt to generate a query that joins multiple tables and produces an output.

First, give ideology and file structure

2.

It gave this folder structure and I prompted to create these.

```
ecommerce-analytics/  
|  
├─ data/  
|   └─ raw/  
|  
├─ db/  
|   └─ ecommerce.db  
|  
├─ sql/  
|   └─ master_join.sql  
|  
├─ src/  
|   ├── generate_data.py  
|   ├── ingest.py  
|   └─ run_query.py  
|  
├─ requirements.txt  
└─ README.md
```

3.

I Divided the workflow in three task .Then created environment and download req.

1.generate_data.py

2.ingest.py

3.run_query.py along with the sql code creation.

4.

prompt: Generate the required code for phase 1 generate_data.py

It generated the code and tested/run the code on terminal

Result: Created the files on database

Pushed this in the repo as main branch which is the basis for the code.

5.

Created a new branch in git from main branch called feature/ingest.py.

Prompt: Generate code for ingest.py

Tested by running the .py file

Now the ingest part is done.

Since Verified I raised merge pull to main.

6.

Similarly created a new branch called feature/sql-query.

Prompt: Generate the code for run_query.py along with the SQL code creation.

Along with required files

Tested this by running the file.

Found the right result. Raised PR request to Main.

7.

Now I want to create a run file that runs the three commands in order rather than me running it manually.

Result:

Option: Windows Batch File

8.

Enhancement

The generate_data.py I wanted in a structure

prompt: makes this into class and method.

TEST AND RESULT

```
● PS C:\Users\kisha\Desktop\ecommerce-analytics> venv\Scripts\activate
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>echo Running e-commerce ETL pipeline...
Running e-commerce ETL pipeline...
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>echo Generating synthetic data...
Generating synthetic data...
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>python src\generate_data.py
Synthetic dataset generated successfully.
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>echo Ingesting into SQLite...
Ingesting into SQLite...
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>python src\ingest.py
Ingestion complete. Check logs/ingestion.log.
```

```
C:\Users\kisha\Desktop\ecommerce-analytics>python src\run_query.py
```

	customer_name	city	order_id	order_date	product_name	quantity	item_price	total_amount	payment_status	payment_method
0	Alison Warren	New Amanda	12	2025-11-02	Heavy	1	286.01	25.41	Pending	Wallet
1	Toni Stephens	Rollinsside	14	2025-10-31	Heavy	1	286.01	712.72	Pending	Credit Card
2	Andrew Phillips	Kristiburgh	24	2025-10-11	Look	1	16.5	324.76	Failed	NetBanking
3	Andrew Phillips	Kristiburgh	24	2025-10-11	Eat	4	418.27	324.76	Failed	NetBanking
4	Olivia Thompson	Brandonfurt	18	2025-09-21	Attack	4	32.87	371.3	Pending	NetBanking
5	Olivia Thompson	Brandonfurt	18	2025-09-21	Sure	3	197.41	371.3	Pending	NetBanking
6	Toni Stephens	Rollinsside	8	2025-09-01	Look	3	16.5	93.06	Failed	Wallet
7	Yolanda Harmon	Lake Matthew	6	2025-08-26	Yard	4	123.14	158.11	Success	UPI
8	Robert Walker	North Steven	11	2025-08-15	Attorney	2	431.37	214.74	Success	Wallet
9	Olivia Thompson	Brandonfurt	22	2025-08-05	Direction	3	313.01	344.28	Failed	NetBanking
10	Jeremy Marks	Brucemouth	23	2025-07-23	Head	1	205.93	82.29	Success	UPI
11	Jeremy Marks	Brucemouth	23	2025-07-23	Part	1	17.82	82.29	Success	UPI
12	Nicole Davis DVM	Traciview	17	2025-07-20	Public	2	198.85	92.56	Pending	UPI
13	Nicole Davis DVM	Traciview	17	2025-07-20	Me	2	201.62	92.56	Pending	UPI
14	Yolanda Harmon	Lake Matthew	9	2025-07-09	Head	4	205.93	987.15	Success	UPI
15	Yolanda Harmon	Lake Matthew	9	2025-07-09	Expect	2	128.1	987.15	Success	UPI
16	Yolanda Harmon	Lake Matthew	9	2025-07-09	Expect	3	128.1	987.15	Success	UPI
17	Ryan Benitez	South Ethan	13	2025-07-06	Military	3	238.71	819.15	Failed	Wallet
18	Ryan Benitez	South Ethan	13	2025-07-06	Yard	4	123.14	819.15	Failed	Wallet
19	Toni Stephens	Rollinsside	3	2025-06-21	Military	4	238.71	369.62	Pending	NetBanking
20	Elizabeth Hunt	South Austinton	5	2025-05-09	Top	2	124.06	551.84	Pending	Wallet
21	Elizabeth Hunt	South Austinton	5	2025-05-09	Top	3	124.06	551.84	Pending	Wallet
22	Elizabeth Hunt	South Austinton	5	2025-05-09	Claim	3	491.78	551.84	Pending	Wallet
23	Deborah Fuller	East Shannonside	1	2025-04-16	Like	3	230.74	285.92	Pending	Wallet
24	Deborah Fuller	East Shannonside	1	2025-04-16	Part	2	17.82	285.92	Pending	Wallet
25	Deborah Fuller	East Shannonside	1	2025-04-16	Eat	2	418.27	285.92	Pending	Wallet
26	Ryan Benitez	South Ethan	7	2025-04-07	Claim	2	491.78	806.15	Failed	Wallet
27	Ryan Benitez	South Ethan	7	2025-04-07	Eat	2	418.27	806.15	Failed	Wallet

▼ data \raw

customers.csv

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order_items.csv

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orders.csv

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payments.csv

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products.csv

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