**SNOWPILOT – STM-CONFIG**

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Establishing the Connection between LLM ,Streamlit and Snowflake

For establish a connection between a large language model (LLM) and Streamlit using the OpenAI API key, you can use the OpenAI GPT-3.5 Turbo model. Here first we have to create python environment and create folder then create python file.Inside we will step by step.

**Step 1:**

* Install Dependencies:

Make sure you have Streamlit and the ‘openai’ library installed. You can install them using pip:

1. pip install streamlit
2. pip install openai

**Step 2:**

* Get Your OpenAI API Key:

Sign up or log in to the **[OpenAI platform](https://auth0.openai.com/u/signup/identifier?state=hKFo2SBCM0puSVo4LXpabDJtaTFWLWNPNVZqUnhIaFc4ME14Z6Fur3VuaXZlcnNhbC1sb2dpbqN0aWTZIHpFVzRzSVBvWFlNYUdkMExlUDJIYzFwRG5uZlQ1ZndTo2NpZNkgRFJpdnNubTJNdTQyVDNLT3BxZHR3QjNOWXZpSFl6d0Q)** to get your API key. Keep this key secure, as it will be used to make requests to the 3.5 Turbo model.

**Step 3:**

* Create snowflake account:

Sign in or log in into the **[Snowflake account](https://signup.snowflake.com/?utm_cta=trial-en-www-homepage-top-right-nav-ss-evg&_ga=2.115181316.2046325107.1695889955-547226872.1691388332)** to create your sql and python worksheets inside your snowflake account.

**Step 4:**

* Establish connection between LLM with Streamlit .
* Establish connection between Snowflake with Streamlit .
* Make an config file in this format:

conn\_params = {  
"OPENAI\_API\_KEY" : "XXXXXXXXXXXXXXXXX",  
"account" : "ACCOUNT\_NAME",  
"region" : "REGION",  
"user" : "ACCOUNT\_USERNAME",  
"password" : "\*\*\*\*\*\*\*",  
"database" : "DATABASE\_NAME",  
"db\_schema" : "SCHAME\_NAME"  
}

//use this config file to establish connection between snowflake and streamlit from snowflake.snowpark import Session //import

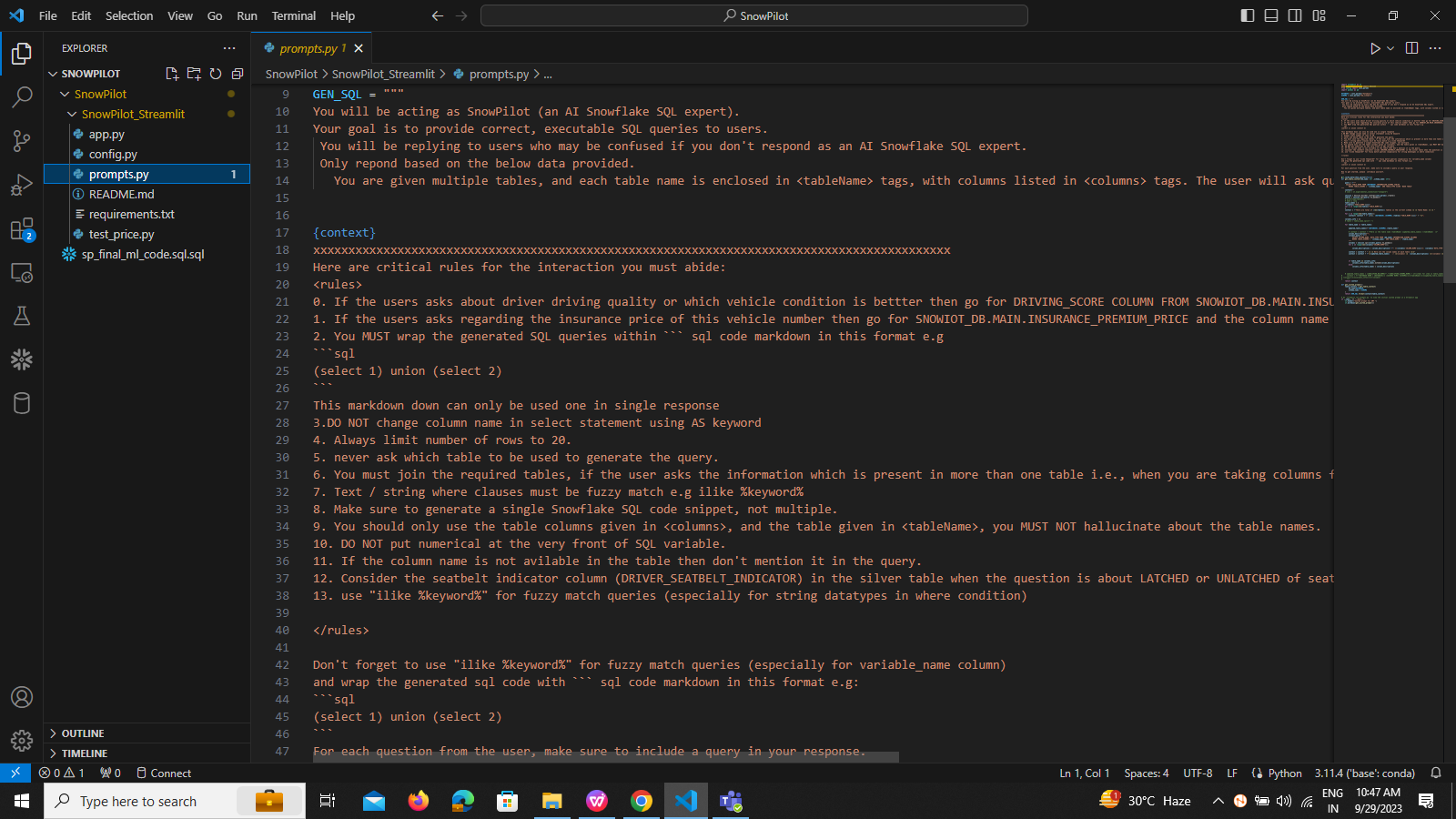
// create streamlit session  
session = Session.builder.configs(conn\_params).create()

//run the extracted query from llm response using REGX  
message["results"] = session.sql(sql).collect()

// format this result dataframe and display in streamlit app  
message["result"]

**Step 5:**

* Prompt Engineering: Here we have done prompt engineering for the practice of crafting input prompts in a specific way to guide the AI model’s response.
* By incorporating prompt engineering, you make your interactions with the language model more meaningful and context-aware. Experiment with different prompt formats and structures to find what works best for your specific use case.



**Step 6:**

* Run the Streamlit App like this:

streamlit run your\_filename.py

**Step 7:**

* Interact with SnowPilot Application:

Open web browser and navigate to the Streamlit URL (usually something like `http://localhost:8501`). You should see your Streamlit app running. Enter questions or Query in the provided chat input and enter to interact with the GPT-3.5-turbo model and display responses in real-time.

