**Solution**

Task1:

Attached is the python code for Connecting the OpenWeather API and retrieved the list of coordinates.



Task 2: Below are the step which can be consoder for the same.

**Data Upload to Azure Blob Storage**:

Data is uploaded or generated in Azure Blob Storage. The data can be structured (CSV, Parquet) or semi-structured (JSON, Avro).

**Create External Stage in Snowflake**:

Create a Snowflake external stage pointing to the Blob Storage location. Snowflake can access the data without copying it into the Snowflake environment initially.

**Use COPY INTO Command for Data Load**:

Schedule the loading process using the **COPY INTO** command, which pulls the data from Blob Storage to Snowflake tables. Depending on the data format and file size, you can load data incrementally with high performance.

**Automation via Orchestration Tools**:

Use an orchestration tool like **Airflow** or **Azure Data Factory** to trigger and monitor the data loading jobs based on predefined schedules (or event-driven based on Blob Storage uploads).

**Data Transformation in Snowflake**:

Once data is loaded into Snowflake staging tables, use Snowflake's SQL features (such as materialized views, transformations) for any necessary post-load transformations.

**Query & Analyze**:

After data ingestion, it is immediately available for querying in Snowflake. You can set up downstream pipelines for further processing and reporting.

