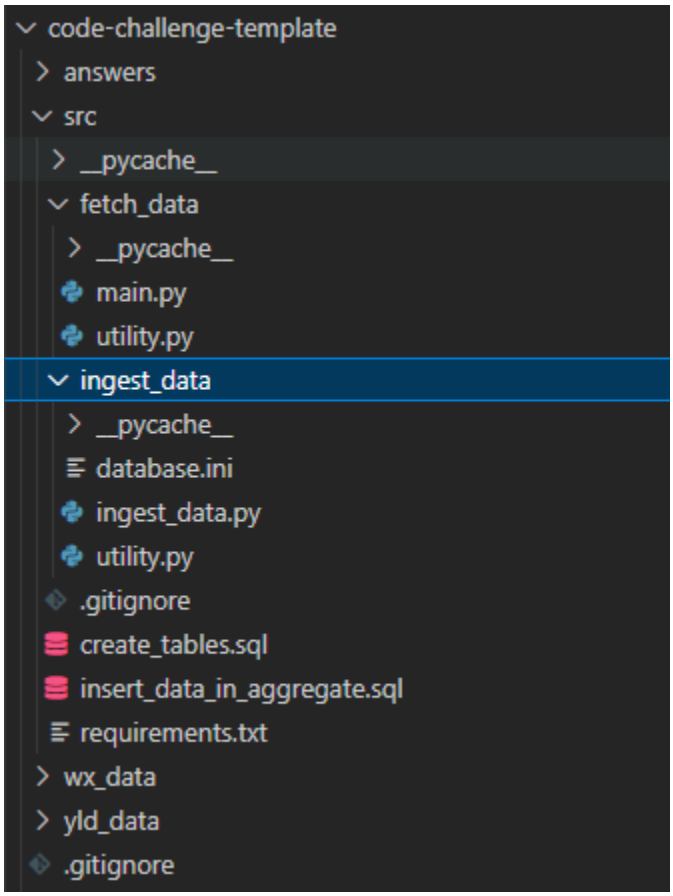
Git Clone Repository

Setup to run the code.
(Folder structure)



1. create tables using in postgres using
    1.1 code-challenge-template\src\create_tables.sql

2. Install all libraries in python environment
    2.1 command : pip install -r code-challenge-template\src\requirements.txt

3. update database credential in **code-challenge-template\src\ingest_data\utility.py**
    3.1 Replace all 5 parameters in def get_connections()

```python
def get_coonection():

    con = psycopg2.connect(
    database="postgres",
    user="your_user",
    password="your_password",
    host="localhost",
    port= '5432'
    )
    return con
```

Save the file

4. Run Python script

Command prompt : python yourpath\code-challenge-template\src\ingest_data\ingest_data.py

Example:

```
C:\Users\[redacted]>python D:\python_visual_studio\wx_data\code-challenge-template\src\ingest_data\ingest_data.py
Start Time : 1678663790.6582243

insert yeild data

Total row inserted for yeild data  0
insert weather data
Total row inserted for weather data  0

End Time : 1678663820.432345

Total execution time : %s seconds 29.774120569229126
```

5. Run code-challenge-template\src\insert_data_in_aggregate.sql

5.1 Inserts data in **aggregated_wx_data** table
5.2 Contain select query to get aggregated data from **wx_data_table**

6. update database credential in **code-challenge-template\src\fetch_data\utility.py**
6.1 Replace all 5 parameters in def get_connections()

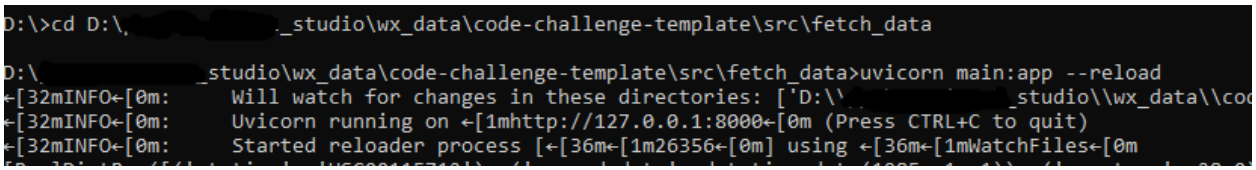
```python
def get_coonection():

    con = psycopg2.connect(
    database="postgres",
    user="your_user",
    password="your_password",
    host="localhost",
    port= '5432'
    )
    return con
```

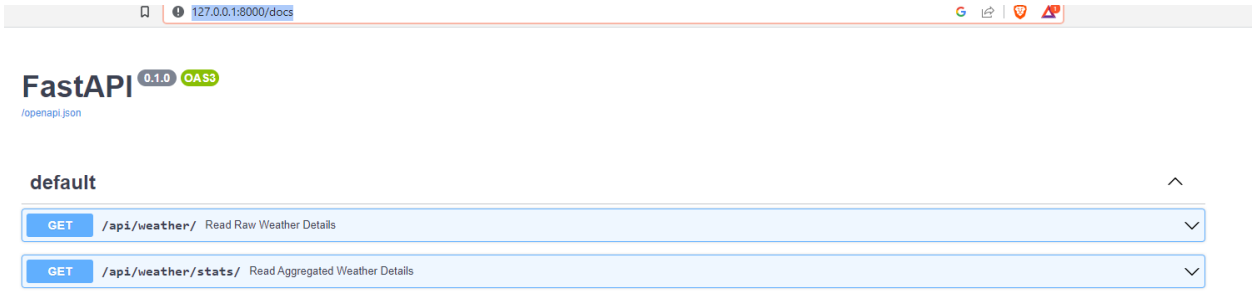
Save the file

7. Open new command prompt and change working dir to
    7.1 Code-challenge-template\src\fetch_data
    7.2 run **uvicorn main:app –reload** to start Application server

Example:

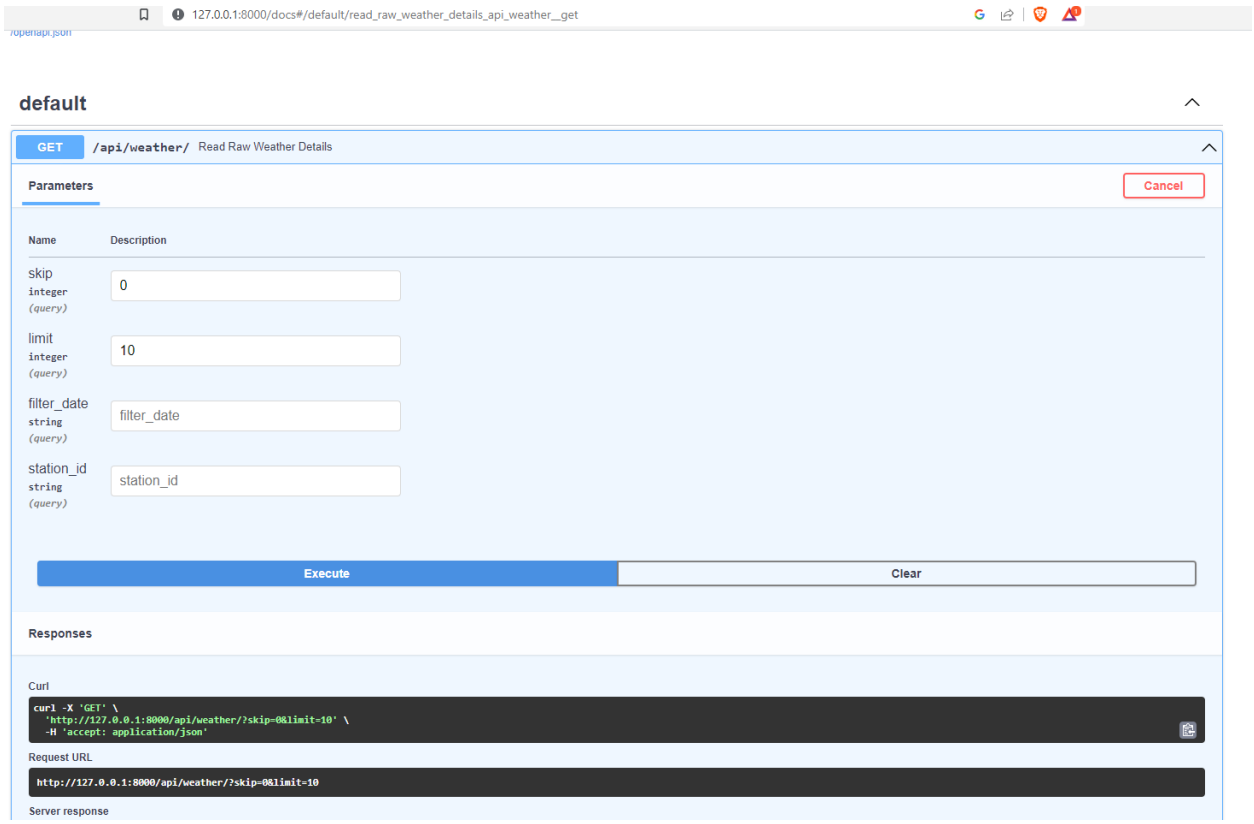


8. Open url in browser (http://127.0.0.1:8000/docs)

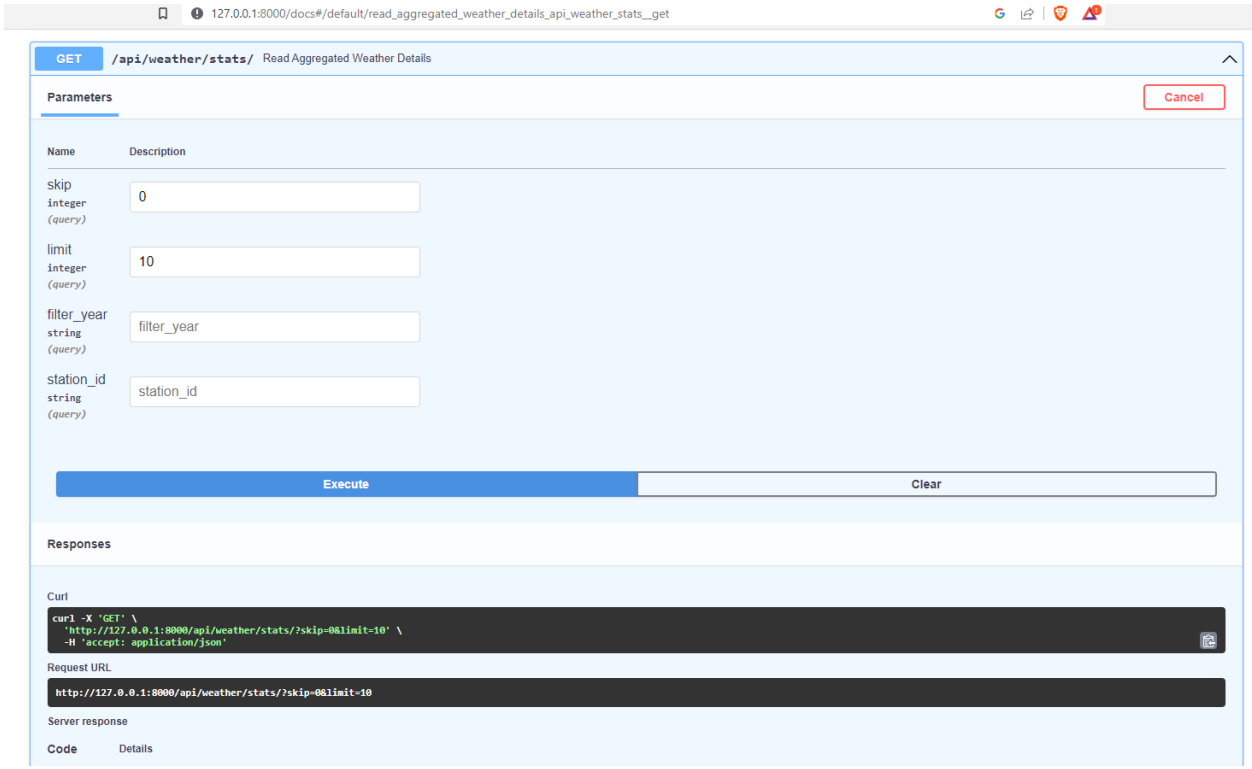


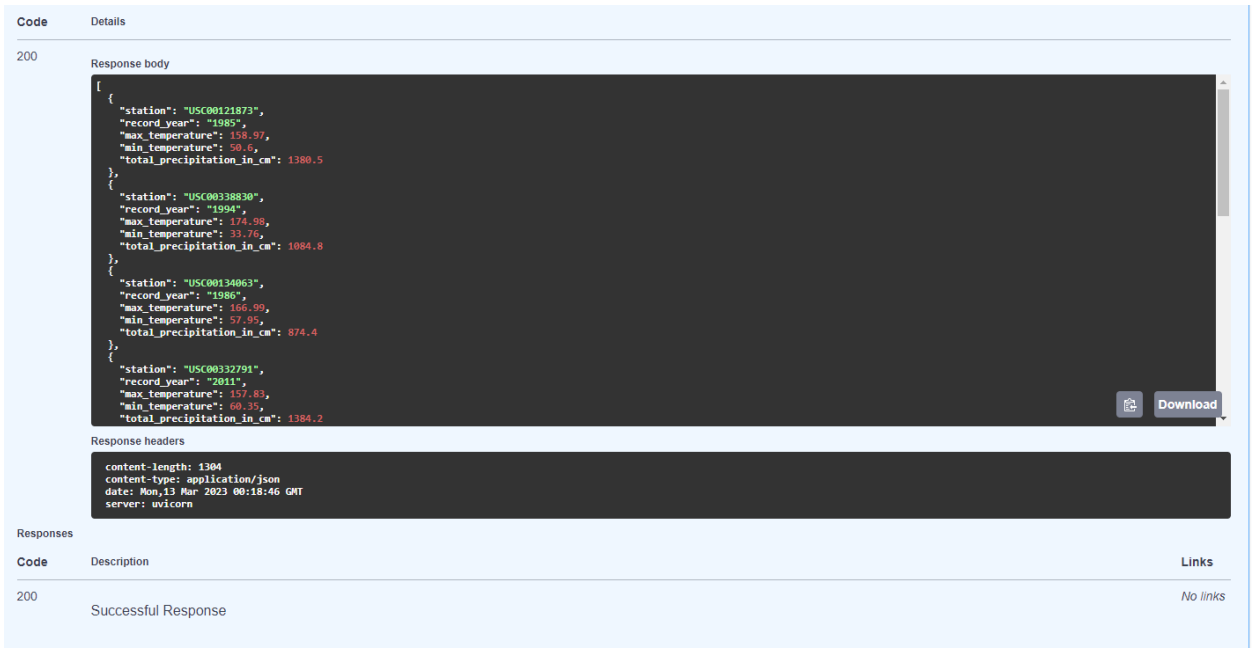
9. Test the endpoints

9.1 /app/weather/



9.2 /app/weather/stats


127.0.0.1:8000/docs#/default/read_aggregated_weather_details_api_weather_stats__get
GET
/api/weather/stats/
Read Aggregated Weather Details
Parameters
Cancel
Name
Description
skip
integer
(query)
0
limit
integer
(query)
10
filter_year
string
(query)
filter_year
station_id
string
(query)
station_id
Execute
Clear
Responses
Curl
curl -X 'GET' \
'http://127.0.0.1:8000/api/weather/stats/?skip=0&limit=10' \
-H 'accept: application/json'
Request URL
http://127.0.0.1:8000/api/weather/stats/?skip=0&limit=10
Server response
Code
Details


Code
Details
200
Response body
[
{
"station": "USC00121873",
"record_year": "1985",
"max_temperature": 158.97,
"min_temperature": 50.6,
"total_precipitation_in_cm": 1380.5
},
{
"station": "USC00338830",
"record_year": "1994",
"max_temperature": 174.98,
"min_temperature": 33.76,
"total_precipitation_in_cm": 1084.8
},
{
"station": "USC00134063",
"record_year": "1986",
"max_temperature": 166.99,
"min_temperature": 57.95,
"total_precipitation_in_cm": 874.4
},
{
"station": "USC00332791",
"record_year": "2011",
"max_temperature": 157.83,
"min_temperature": 60.35,
"total_precipitation_in_cm": 1384.2
Download
Response headers
content-length: 1304
content-type: application/json
date: Mon,13 Mar 2023 00:18:46 GMT
server: uvicorn
Responses
Code
Description
Links
200
Successful Response
No links